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     (FILE 'HOME' ENTERED AT 16:08:35 ON 04 AUG 1999)
                SET COST OFF
                SET AUHELP OFF

     FILE 'HCAPLUS' ENTERED AT 16:08:44 ON 04 AUG 1999
                E BAY S/AU
L1            16 S E3,E4,E18
                E CANTACUZENE D/AU
L2            50 S E3-E5,E9,E10
                E BACK E1
                E LECLERC C/AU
L3           122 S E3,E7-E9
                E LO MAN R/AU
L4            19 S E3,E4
L5           174 S L1-L4
                E PASTEUR/PA,CS
                E PASTEU/PA,CS
L6         20758 S E5-E8
L7            84 S GLYCOPEPTIDE AND L5,L6
L8            12 S CARBOHYDRATE#/SC,SX,CW,BI,AB AND L7
L9            15 S ANTIGEN? AND L7
L10            8 S L8 AND L9
L11           10 S VACCIN? AND L7
L12            6 S L11 AND L8
L13            7 S L11 AND L9
L14            7 S L12,L13
L15            2 S L10 NOT L14
L16            2 S L14 AND MULTIPLE/TI
                SEL RN

     FILE 'REGISTRY' ENTERED AT 16:13:28 ON 04 AUG 1999
L17           15 S E1-E15
L18            5 S L17 AND SEQ/FA
L19           10 S L17 NOT L18
L20            1 S L19 AND LYSIN?
L21            1 S L19 AND LYSYL?

     FILE 'HCAPLUS' ENTERED AT 16:18:23 ON 04 AUG 1999

     FILE 'REGISTRY' ENTERED AT 16:19:18 ON 04 AUG 1999
L22         1789 S (56-87-1 OR 923-27-3 OR 70-54-2)/CRN
L23          647 S L22 AND PMS/CI
L24            6 S L23 AND 1/NC

     FILE 'HCAOLD' ENTERED AT 16:20:41 ON 04 AUG 1999
L25            0 S L24

     FILE 'HCAPLUS' ENTERED AT 16:20:46 ON 04 AUG 1999
L26         4145 S L24
L27            9 S L5,L6 AND L26
L28          206 S L26 AND CARBOHYDRATE#/SC,SX,CW,BI,AB
L29           69 S L26 AND VACCIN?
L30          350 S L26 AND ANTIGEN?
L31           42 S L28 AND L29,L30
L32           17 S 15/SC,SX AND L31
L33          239 S 15/SC AND L26
L34           14 S L33 AND L28
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L35          33 S L33 AND L29
L36         100 S L33 AND L30
L37          31 S L36 AND L34,L35
L38          35 S L34,L37
L39           1 S L27 AND L38
L40           8 S L27 NOT L39
L41          26 S L38 AND VACCIN?
L42          26 S L39,L41
L43           9 S L38 NOT L42
L44          40 S L26 AND EPITOP?
L45          26 S L26 AND CD4?
L46           9 S L44,L45 AND L28
L47          10 S L44,L45 AND L29
L48          41 S L44,L45 AND L30
L49          14 S L48 AND L46,L47
L50          17 S L46,L47,L49,L39
L51           8 S L50 AND 15/SC
L52           9 S L50 NOT L51

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 16:27:14 ON 04 AUG 1999
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FILE COVERS 1967 - 4 Aug 1999  VOL 131 ISS 6
FILE LAST UPDATED: 4 Aug 1999  (19990804/ED)

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 more information.


=> s l16,l50
L53          18 (L16 OR L50)

=> d all tot

L53  ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 1999 ACS
AN   1999:285989  HCAPLUS
DN   130:329186
TI   Stabilized hydrogel microbeads for vaccine antigen
     mucosal delivery
IN   Gombotz, Wayne R.; Wee, Siow Fong; Fanslow, William C., III
PA   Immunex Corporation, USA
SO   U.S., 14 pp.
     CODEN: USXXAM
DT   Patent
LA   English
IC   ICM  A61K039-00
```

ICS A61K009-14; A61K009-51; A61K045-00
NCL 424184100
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5900238	A	19990504	US 1995-508229	19950727

AB Compns. comprising an immunogenic amt. of an **antigen** encapsulated in a stabilized hydrogel microbead are disclosed. The compns. provide a delivery system for **antigens** such as **vaccines**. Also provided are methods of stimulating an immune response comprising administration of the inventive compns. Thus, a compn. for mucosal administration comprises an immunogenic amt. of an **antigen** encapsulated in an alginate microbead having a mean diam. of from about 30 .mu.m to about 50 .mu.m, wherein the microbead is prepd. by providing a soln. comprising an alginate and an **antigen**, forming microbeads comprising the alginate and the **antigen** my micronizing the alginate and **antigen** soln., curing the microbeads, stabilizing the cured microbeads by contacting the microbeads with a polycation, and coating the stabilized microbeads with an addnl. coating of alginate.

ST hydrogel microbead **antigen** mucosa delivery **vaccine**

IT Fusion proteins (chimeric proteins)
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(GM-CSF with IL-3; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT **Antigens**
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(Pn14; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT CD30 (**antigen**)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antagonists; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT Interleukin 3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(fusion protein with GM-CSF; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT Microparticles (drug delivery systems)
(microbeads; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT Pulverization
(micronization; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT Drug delivery systems
(mucosal; stabilized hydrogel microbeads for **vaccine** **antigen** mucosal delivery)

IT IgA
IgG1
IgG2
Immunoglobulins
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU

(Occurrence)
(of lung secretions; stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT Lung
(secretions of, Igs of; stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT Cationic polyelectrolytes
Hydrogels (drug delivery systems)
Immunomodulators
Mucous membrane
Nasal drug delivery systems
Vaccines
(stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT Ovalbumin
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT **Antigens**
CD40 ligand
Interleukin 15
Interleukin 16
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT 83869-56-1, Gm-csf
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)
IT 9005-32-7, Alginic acid 9005-38-3, Sodium alginate **25104-18-1**, Polylysine 38000-06-5, Polylysine
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stabilized hydrogel microbeads for **vaccine antigen** mucosal delivery)

L53 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:162111 HCAPLUS
DN 130:205904
TI Compacting nucleic acids for delivery to cells without aggregation
IN Hanson, Richard W.; Perales, Jose C.; Ferkol, Thomas W.
PA Case Western Reserve University, USA; Ohio University
SO U.S., 57 pp., Cont.-in-part of U.S. Ser. No. 216,534, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM C12N015-11
NCL 536023100
CC 3-1 (Biochemical Genetics)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5877302	A	19990302	US 1997-716415	19970212

WO 9525809 A1 19950928 WO 1995-US3677 19950323
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
PRAI US 1994-216534 19940323
WO 1995-US3677 19950323

AB Methods and reagents for compaction of DNA without causing significant aggregation and that can be used to facilitate their uptake by target cells are described. The nucleic acids may be used in gene therapy. Cell targetting may be achieved by binding the compacted DNA to a cell-specific ligand. The nucleic acid is preferably compacted to <30 nm or no more than twice its theor. min. diam. Conjugates of polylysine and galactopyranosyl phenylisothiocyanate were used to compact a plasmid carrying a factor IX gene under control of the PEP carboxykinase gene promoter. The compacted complexes were injected into rat livers and the rats expressed the gene for the duration of the expt. (140 days). Expression of the gene was induced by feeding a **carbohydrate** -free diet and the human protein could be detected in the blood. The transforming DNA was maintained as an episome. Expts. with report genes introduced into muscle cells showed that use of the complexes increased reporter gene expression by about 20-fold.

ST DNA compaction polylysine conjugates gene therapy; cell targetting transforming DNA polylysine conjugate

IT **CD4 (antigen)**
gp120 (env glycoprotein)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibodies to, in targeting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Cationic polyelectrolytes
(as compacting agent for DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Albumins, biological studies
Apolipoprotein E
Lactoferrins
Lectins
Transferrins
Tumor necrosis factors
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as ligand in targetting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Mannose receptors
Polymeric immunoglobulin receptors
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as target in delivery of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Gene therapy
Transformation (genetic)
(compacting nucleic acids for delivery to cells without aggregation)

IT DNA
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(compaction of; compacting nucleic acids for delivery to cells without aggregation)

IT Monoclonal antibodies
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with polylysine, in targetting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT LDL receptors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene for, expression in rabbit liver of; compacting nucleic acids for delivery to cells without aggregation)

IT Familial hypercholesterolemia
Hemophilia B
(gene therapy of; compacting nucleic acids for delivery to cells without aggregation)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(gluconeogenesis-induced, expression of factor IX gene from; compacting nucleic acids for delivery to cells without aggregation)

IT Ion channel
Receptors
Toxins
Transport proteins
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in targetting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Metabolic diseases
(inborn, gene therapy of; compacting nucleic acids for delivery to cells without aggregation)

IT Nucleic acids
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methylphosphonate-linked, gene therapy using; compacting nucleic acids for delivery to cells without aggregation)

IT Disease models
(of familial hypercholesteremia, gene therapy with LDL receptor gene of; compacting nucleic acids for delivery to cells without aggregation)

IT Plasmid vectors
(pCMV-hLDLR, gene for human LDL receptor on, expression in Watanabe rabbit liver of; compacting nucleic acids for delivery to cells without aggregation)

IT Plasmid vectors
(pFIX, gene for human factor IX on, expression in rat liver of; compacting nucleic acids for delivery to cells without aggregation)

IT Plasmid vectors
(pPCK-hLDLR, gene for human LDL receptor on, expression in Watanabe rabbit liver of; compacting nucleic acids for delivery to cells without aggregation)

IT Cytoskeleton
(proteins of, in targetting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT Airway epithelium
Ganglion cell (retinal)
Liver
Macrophage
Muscle
(targetted introduction of genes into; compacting nucleic acids for delivery to cells without aggregation)

IT **25104-18-1DP**, Polylysine, conjugates with galactose
38000-06-5DP, Polylysine, conjugates with galactose
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(as compacting agent for DNA; compacting nucleic acids for delivery to cells without aggregation)

IT 59-23-4, D-Galactose, biological studies 63-42-3, Lactose 3458-28-4, Mannose 3672-15-9, Mannose-6-phosphate 9002-61-3, Chorionic gonadotrophin 9002-62-4, Prolactin, biological studies 9002-67-9, LH 9002-68-0, FSH 9004-10-8, Insulin, biological studies 9007-92-5, Glucagon, biological studies 62229-50-9, EGF
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as ligand in targetting of transforming DNA; compacting nucleic acids for delivery to cells without aggregation)

IT 9001-28-9, Blood-coagulation factor IX
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene for, expression in rat liver of; compacting nucleic acids for delivery to cells without aggregation)

IT 9013-08-5, PEP carboxykinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gluconeogenesis-induced promoter of gene for, expression of factor IX gene from; compacting nucleic acids for delivery to cells without aggregation)

IT 120967-92-2
RL: RCT (Reactant)
(in galactosylation of polylysine; compacting nucleic acids for delivery to cells without aggregation)

IT 96345-79-8
RL: RCT (Reactant)
(in mannosylation of polylysine; compacting nucleic acids for delivery to cells without aggregation)

L53 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:682157 HCAPLUS
DN 129:289180
TI **Multiple antigen glycopeptide carbohydrate, vaccine** comprising it and its use
IN **Bay, Sylvie; Cantacuzene, Daniele; Leclerc, Claude; Lo-Man, Richard**
PA Institut **Pasteur**, Fr.
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K047-48
CC **15-2** (Immunochemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9843677	A1	19981008	WO 1998-EP1922	19980327

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,

FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9868323 A1 19981022 AU 1998-68323 19980327
PRAI US 1997-41726 19970327
WO 1998-EP1922 19980327

AB A **carbohydrate** peptide conjugate comprising: a carrier comprising a dendrimeric poly-Lysine enabling multiple **epitopes** to be covalently attached thereto, at least one peptide comprising one T **epitope** or several identical or different T **epitopes**, at least one **carbohydrate** moiety, or a deriv. thereof, contg. B **epitope**, provided it is not a sialoside, or several identical or different **epitopes**. Use of this conjugate for inducing immune response and for treating viral, bacterial or fungal infections and cancers.

ST **carbohydrate** peptide conjugate **vaccine** cancer infection

IT Blood groups
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Tn blood-group substances, conjugates; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT Immunity
(cellular and humoral; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT Capsular polysaccharides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT B cell (lymphocyte)
T cell (lymphocyte)
(**epitope**; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT Protein VP1
Tumor-associated **antigen**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**epitope**; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT Polysaccharides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sialylated; **vaccine** comprising multiple **antigen glycopeptide carbohydrate** for treating cancers and infections)

IT Adjuvants (immunological)
Animal
Antitumor agents
Bacteria (Eubacteria)
CD8-positive T cell
Cancer diagnosis
Carriers
Cytomegalovirus
Epitopes
Fungi
Haemophilus influenzae
Hepatitis virus
Human immunodeficiency virus

Human poliovirus 1
Immunotherapy
Neisseria meningitidis
Pathogen
Streptococcus
Streptococcus pneumoniae
Vaccines
Viral infection
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

IT Antibodies
RL: MFM (Metabolic formation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

IT Glycoconjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

IT Peptide conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

IT **25104-18-1**, Polylysine
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

IT 67262-86-6DP, conjugates 67315-18-8DP, conjugates 155569-99-6DP, conjugates 214348-71-7DP, conjugates 214348-72-8DP, conjugates 214348-73-9DP, conjugates 214348-74-0DP, conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**vaccine** comprising multiple **antigen** **glycopeptide carbohydrate** for treating cancers and infections)

L53 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:542986 HCAPLUS
DN 129:166180
TI pH-sensitive liposomes and other types of encapsulated **vaccines** containing immunomodulators, and methods for making and using same
IN Bystryn, Jean-Claude
PA USA
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-00
ICS A61K039-02; A61K039-12; A61K045-05; A61K047-42; A61K047-44; A61K009-127; G01N033-53; G01N033-543; G01N033-567
CC 63-3 (Pharmaceuticals)

Section cross-reference(s): 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9833520	A1	19980806	WO 1998-US2463	19980205

W: JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1997-37217 19970205

AB The present invention provides improved liposomal **vaccine** compns. comprising an immunomodulator and a carrier virosome, methods for their use and measurement of responses thereto.

ST **vaccine** liposome immunostimulant formulation pH

IT T cell (lymphocyte)
(CD8-pos.; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT CD8 (**antigen**)
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(T-cell bearing; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Heat-shock proteins
Toxins
RL: DEV (Device component use); USES (Uses)
(**antigen** carriers; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Brain tumors
Breast tumors
Colon tumors
Digestive system tumors
Gastric tumors
Leukemia
Lung tumors
Ovarian tumors
Prostatic tumors
(**antigens** of; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Biodegradable polymers
RL: DEV (Device component use); USES (Uses)
(beads; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Antibodies
RL: BPR (Biological process); DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cytokine-specific; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT **Antigens**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(delivery and presentation of; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Bacteria (Eubacteria)
Fungi
Mycoplasma
Prion
Virus
(immunity to; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Fluoropolymers, uses

RL: DEV (Device component use); USES (Uses)
(membrane; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Endocytosis
(of **antigen**; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT **Antigen** presentation
Autoimmune diseases
Drug carriers (drug delivery systems)
Immunostimulants
Liposomes (drug delivery systems)
Microencapsulation
Vaccines
pH
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Interleukin 1
Interleukin 12
Interleukin 2
Interleukin 4
Interleukin 6
Melanoma-associated **antigen**
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Interferon .gamma.
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT **CD4 (antigen)**
Class I MHC **antigens**
Class II HLA **antigens**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Glass beads
RL: DEV (Device component use); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT **Antigens**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(tumor-specific **antigens**; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT Organelle
(virosome; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT 7439-89-6, Iron, uses
RL: DEV (Device component use); USES (Uses)
(beads; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT 24937-79-9, Immobilon-p
RL: DEV (Device component use); USES (Uses)
(membrane; pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT 83869-56-1, Gmcsf
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT 1510-21-0, Cholesteryl hemisuccinate 2462-63-7, Dope
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

IT **25104-18-1**, Polylysine 38000-06-5, Polylysine
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pH-sensitive liposomes and other types of encapsulated **vaccines** contg. immunomodulators)

L53 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:490543 HCAPLUS
DN 129:133126
TI A method and composition for cancer treatment by enzymic conversion of soluble radioactive toxic agents
IN Rose, Samuel
PA Rose, Samuel, USA
SO PCT Int. Appl., 161 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K051-00
ICS A61M036-14
CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9830247	A1	19980716	WO 1998-US511	19980113
	W: AU, CA, JP, KR, NO, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9859131	A1	19980803	AU 1998-59131	19980113
PRAI	US 1997-782219		19970113		
	WO 1998-US511		19980113		

AB A method for the treatment of cancer is disclosed which is capable of directing supralethal doses of radiation, called Hot-Spots, virtually exclusively to the cancer. The present invention involves a multi-step therapy process and includes a class of novel chem. agents. In accordance with the invention, it was discovered that sol. precipitable materials can be made to accumulate as non-digestible ppts. in targeted cells as a result of enzyme action within the targeted cells. Accumulation is achieved by administering to the living host a sol. binary reagent made by attaching a targeting agent to a novel chem. agent which is a sol. precipitable material. The binary reagent binds to **antigenic** receptors on targeted cells which endocytose binary reagent and transport it into the lysosomes where enzymes detach the sol. precipitable material from the targeting agent, causing it to ppt., accumulate, and be retained in the cells. Increasing amts. of ppt. can be made to accumulate in cells by continuing the administration of the binary reagent. The accumulated ppt. is relocated to the extra-cellular fluid by selectively killing a

fraction of cancer cells. Now relocated in the extra-cellular fluid of the cancer, the ppt. is used as a "platform" from which to generate Hot-Spots. A bispecific reagent with a non-mammalian enzyme moiety is made to bind to the ppt. A sol. radioactive material is administered which is converted by the enzyme moiety of the bound bispecific reagent into a new form which is retained adjacent to the ppt. for an extended period of time, thereby generating Hot-Spots which non-selectively kill all cells adjacent to the ppt. in the extra-cellular fluid of the cancer.

ST radioactive toxic agent cancer targeted therapy; endocytosis lysosome pptn radioactive therapy cancer; hot spot radiation cancer therapy

IT Hepatoma
(asialoglycoprotein receptor-contg.; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Antitumor agents
Cytotoxic agents
Dimerization
Drug targeting
Endocytosis
Epitopes
Extracellular fluid
Extracellular matrix
Lysosome
Metabolism
Oxidation (biological)
Precipitates
Precipitation (chemical)
Radioactive substances
Radiotherapy
Solubilizers
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT **Antigen** receptors
Asialoglycoprotein receptors
Sulfated glycosaminoglycans
Tumor-associated **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Collagens, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT DNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Fibronectins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Histones
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer treatment method and compn. using lysosomal pptn., ppt.

relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT **Carbohydrates**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Proteoglycans, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Thiols (organic), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell-impermeant; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Materials
(chems., anionic, cell-impermeant; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Enzymes, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates, with targeting agents; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Histones
Nucleoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(deoxyribonucleohistones; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Amphiphiles
(dicationic; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Hormones (animal), biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)

(hormonal status alteration; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Glycosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(indoxyl; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Enzymes, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(lysosomal; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT Melanins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(opio-; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT DNA complexes
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(with histones; cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT 9024-13-9D, Chondroitinase ABC, targeting agent conjugates 9032-92-2D, Glycosidase, targeting agent conjugates 9073-60-3D, .beta.-Lactamase, targeting agent conjugates
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT 63-42-3DP, Lactose, reaction products with poly-L-lysine and 5-bromoindoxyl phosphate 13822-20-3DP, reaction products with poly-L-lysine and lactose **25104-18-1DP**, Poly-L-lysine, reaction products with lactose and 5-bromoindoxyl phosphate 38000-06-5DP, Poly-L-lysine, reaction products with lactose and 5-bromoindoxyl phosphate
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

IT 65-61-2, Acridine orange 480-93-3D, Indoxyl, (radiolabeled) derivs. 1398-61-4, Chitin 1398-61-4D, Chitin, radiolabeled 1406-05-9D, Penicillin, indoxyl derivs. 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, radiolabeled 9007-28-7, Chondroitin sulfate 9012-76-4, Chitosan 9012-76-4D, Chitosan, radiolabeled 11111-12-9D, Cephalosporin, indoxyl derivs. 25322-68-3 27591-97-5, Tilorone 210527-96-1D, [5,5'-Bi-1H-indole]-3,3'-diol, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer treatment method and compn. using lysosomal pptn., ppt. relocation to extracellular fluid, and enzymic conversion of sol. radioactive toxic agent)

L53 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:430787 HCAPLUS
DN 129:148071
TI Peptides having affinity for gp120
IN Fujii, Takashi; Yokoyama, Hideki; Hamamoto, Hidetoshi
PA Keikoku Seiyaku K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07K005-087
ICS A61K038-00; C07K005-09; C07K005-097; C07K017-08; C07K017-10; A61K039-395; A61K039-42
CC 15-3 (Immunochemistry)
Section cross-reference(s): 1, 34, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10182696	A2	19980707	JP 1996-351474	19961227

OS MARPAT 129:148071

AB The title peptides, useful for inhibition or diagnosis of HIV, having basic structure: H-A1-A2-A3-R (A1 = Tyr, Arg, Phe, Trp, His; A2 = Arg, Tyr, Ala, His, Val, Lys, Trp, Gln; A3 = Lys, Arg, Glu, Tyr, Met; R = OH of carboxyl, NH2 of acid amide), A1'-A2-A3-R (A1' = Tyr, Arg, Phe, Trp, His, or polypeptide residue linked through the amino acid residue above; A2, A3, R = same as above), H-A1-A2-A3' (A3' = Lys, Arg, Glu, Tyr, Met, or polypeptide residue linked through the amino acid residue above), or A1-A2-A3 (A1, A2, A3 = same as above), are synthesized as analogs of neutralizing antibody binding **epitopes**. Conjugates of the peptides with macromol. compds. and/or pharmaceutically active substances, or pharmaceutically acceptable salts of the conjugates, and compns. contg. the peptides (salts) and pharmaceutically acceptable carriers and/or pharmaceutically active substances are also claimed. A peptide H-Tyr-Tyr-Lys-OH bound to HIV-1 gp120 with a dissocn. const. (Kd) of 3.08 .times. 10-9M. An inclusion compd. of the peptide with AZT and cyclodextrin was prepd.

ST HIV gp120 binding peptide
IT **Epitopes**
(antibody; prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)
IT Neutralizing antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**epitope**; prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)
IT AIDS **vaccines**
Diagnosis
Human immunodeficiency virus 1
Protein sequences
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)
IT gp120 (env glycoprotein)
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)
IT 67842-48-2P 79590-40-2P 79590-50-4P 123432-49-5P 130535-31-8P 194877-06-0P 210879-90-6P 210879-93-9P 210879-95-1P 210879-98-4P 210880-01-6P 210880-06-1P 210880-08-3P 210880-10-7P 210880-12-9P 210880-17-4P 210880-19-6P 210880-22-1P 210880-24-3P 210880-26-5DP, reaction products with maleimidated cyclodextrin or polylysine
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)

IT 79-08-3D, Bromoacetic acid, reaction products with iso-Bu chloroformate, AZT, and peptide 543-27-1D, Isobutyl chloroformate, reaction products with bromoacetic acid, AZT, and peptide
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)

IT 108-30-5D, reaction products with cyclodextrin, maleimide, and peptide 64202-52-4D, reaction products with cyclodextrin and peptide
RL: RCT (Reactant)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)

IT 12619-70-4D, Cyclodextrin, maleimidated, reaction products with peptide **25104-18-1D**, Polylysine, maleimidated, reaction products with peptide 38000-06-5D, Polylysine, maleimidated, reaction products with peptide 80307-12-6D, reaction products with polylysine and peptide
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)

IT 30516-87-1D, AZT, peptide conjugates
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptides having affinity for HIV gp120 for AIDS treatment and diagnosis)

L53 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:239318 HCAPLUS
DN 128:293978
TI Compositions and methods for treating viral infections
IN Gelder, Frank B.
PA Probe International, USA
SO PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12Q001-70
ICS A61K039-21; C07K016-00; A23J001-00
CC 15-3 (Immunochemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9815658	A1	19980416	WO 1997-US18257	19971010
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9748131	A1	19980505	AU 1997-48131	19971010

PRAI US 1996-28194 19961010
WO 1997-US18257 19971010

AB Methods and compns. for treatment, diagnosis, and prevention of a virus comprise administering to a patient antibodies which react with regions of viral proteins and result in neutralization of infectivity and inactivation of functionally essential events in the life cycle of the virus. The antibodies recognize viral **epitopes** which fail to elicit an immune response in man when encountered through infection or

naturally through the environment. The viral **epitope** mimics **epitope** region of HIV-1 envelope gp120 external glycoprotein, envelope gp41 transmembrane glycoprotein, reverse transcriptase, protease p10 or gag precursor. In a preferred embodiment, the invention provides compns. and methods useful in the treatment and diagnosis of human immunodeficiency virus (HIV) infections.

ST virus protein HIV1 glycoprotein **epitope** antibody

IT Propionibacterium
(Propionibacterium acini muramyl dipeptide; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT T cell (lymphocyte)
(activator; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Adjuvants (immunological)
Antiserums
Body fluid
Enzyme immunoassay
Epitopes
Human immunodeficiency virus
Human immunodeficiency virus 1
Mammal (Mammalia)
Microparticles
Protein sequences
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Antibodies
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Class I HLA **antigens**
Class II HLA **antigens**
MHC **antigens**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Eosinophil cationic protein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Neurotoxins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Pr55gag protein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT gag gene (microbial)
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT gag proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT gp120 (env glycoprotein)
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT gp41 (env glycoprotein)
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT p24 (gag protein)
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT .alpha.-Fetoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Albumins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Glycopeptides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Macromolecular compounds
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Thyroglobulin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Carriers
(**antigen**; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT **Carbohydrates**, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**carbohydrate**-depleted HIV envelope glycoprotein; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Hemocyanins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(keyhole limpet; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Eosinophil
(neurotoxin; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(p17gag; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT gag proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(p7gag; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Virus
(protein; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT Proteins (general), biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(viral; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT 9068-38-6, Reverse transcriptase 37289-34-2, Deoxyuridine 5'-triphosphate nucleotidohydrolase 78169-47-8, Aspartyl protease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT 206119-83-7 206119-84-8 206119-85-9 206119-86-0 206119-87-1 206119-88-2 206119-89-3 206119-90-6 206203-55-6 206203-60-3
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT 3416-05-5, 3'-Deoxythymidine 7481-88-1 7481-89-2, 2',3'-Dideoxycytidine **25104-18-1**, Poly-L-lysine 38000-06-5, Poly-L-lysine 45159-25-9 53678-77-6, Muramyl dipeptide
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

IT 9001-92-7, Protease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(p10; antibodies recognizing HIV glycoprotein **epitopes** or analogs that do not elicit immune response are prepd. for preventing or treating or diagnosing viral or HIV infections)

L53 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:684420 HCAPLUS
DN 127:345327
TI Non-dendritic backbone peptide carrier
IN Heegaard, Peter Mikael Helweg; Jakobsen, Palle Hoy
PA Pepresearch A/S, Den.; Heegaard, Peter Mikael Helweg; Jakobsen, Palle Hoy
SO PCT Int. Appl., 261 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-00
ICS G01N033-68; A61K038-16; A61K039-385
CC 15-2 (Immunochemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9738011	A1	19971016	WO 1997-DK146	19970403
	W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9725679	A1	19971029	AU 1997-25679	19970403
	AU 704502	B2	19990422		
	EP 896582	A1	19990217	EP 1997-917281	19970403
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CN 1215404	A	19990428	CN 1997-193489	19970403
	NO 9804644	A	19981203	NO 1998-4644	19981002
PRAI	DK 1996-398		19960403		
	WO 1997-DK146		19970403		

AB The present invention relates to a non-dendritic peptide designed for use as a carrier of an immunogenic substance and/or an immune mediator, a construct of said carrier carrying an immunogenic substance and/or an immune mediator, a process for the prepn. of immunogens with high and predictable immunogenicity which comprise said non-dendritic peptide carrier, use of such immunogens for the prodn. of **vaccines** and **vaccines** comprising an immunogenic substance and/or an immune mediator on the peptide carrier. The invention also relates to diagnostic or therapeutic embodiments using the non-dendritic peptide carrier, to diagnostic or therapeutic compns. and to methods for the use thereof in diagnosis of diseases and pregnancy as well as in therapy. The non-dendritic peptide carrier according to the invention comprises 10-50 amino acids capable of forming a secondary structure in a benign buffer after liberation from the solid phase.
ST nondendritic peptide carrier **vaccine** immunogen mediator; solid phase nondendritic peptide **vaccine** carrier
IT Protective groups
((fluorenylmethoxy)carbonyl; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Fibronectins
Laminins
Vitronectin
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(-like binding peptide; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Protective groups
(Boc; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT **Epitopes**
(T cell; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Mucous membrane
(administration; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Conformation
(coil; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Animal tissue
(damage; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT T cell (lymphocyte)
(**epitope**; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Vagina
(fluid; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT DNA formation factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene 41; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Intramuscular injections
(i.m.; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Microparticles
(immune; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Drug delivery systems
(intradermal; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Immunity
(mediator; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Adjuvants (immunological)
Autoimmune diseases
Blood
Cell adhesion
Cerebrospinal fluid
Exudate (animal)
Feces
Hairpin loop
Human immunodeficiency virus 1
Infection
Liposomes
Measles virus
Metastasis (tumor)
Mycobacterium tuberculosis
Nasal drug delivery systems
Oral drug delivery systems
Plasma (blood)
Plasmodium falciparum
Pregnancy

Protein sequences
Saliva
Semen
Serum (blood)
Subcutaneous injections
Tissue culture (animal)
Tumors (animal)
Urine
Vaccines
Wound healing (animal)
Zinc finger
.alpha.-Helix (protein conformation)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Biochemical molecules
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT **Carbohydrates**, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Circumsporozoite **antigen**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT DNA
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Glycoproteins (general), biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Haptens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Interferon .gamma.
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Interleukin 1.beta.
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Lipopolysaccharides
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Lipoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT MSP-1 (protein)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Nucleotides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Oligonucleotides
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Peptide nucleic acids
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Phospholipids, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Protein F
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Proteins (general), biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT RNA
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Tetanus toxoid
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT Tumor necrosis factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT gp120 (env glycoprotein)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune

mediator or **vaccine**)

IT Antibodies
Antigens
Cell adhesion molecules
Cytokines
iscoms
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Carriers
(non-dendritic peptide; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Peptides, biological studies
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(non-dendritic; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Drug delivery systems
(rectal; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Plastics, biological studies
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(surface cell adhesion; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Mammal (Mammalia)
(tissue; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Body fluid
(vaginal; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Amino group
(.alpha.-; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Conformation (protein)
(.beta.-strand, .beta.-turns, and .gamma.-turns; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT **25104-18-1**, Polylysine 38000-06-5, Polylysine 91037-75-1
99896-85-2 110590-64-2 145880-09-7 149635-28-9 149635-29-0
149635-31-4 149635-35-8 162227-40-9 179560-60-2 179560-61-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as carrier; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT 52-90-4, Cysteine, biological studies 56-45-1, Serine, biological studies 56-87-1D, L-Lysine, analogs 70-26-8, Ornithine 305-62-4, .alpha.,.gamma.-Diaminobutyric acid 515-94-6, .alpha.,.beta.-Diaminopropionic acid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(attachment point; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT 9063-57-4, Tuftsin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

IT 106-57-0, Diketopiperazine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(formation; non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT 57-10-3DP, Hexadecanoic acid, peptide conjugate 544-63-8DP, Myristic acid, peptide conjugate
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT 9063-57-4DP, oligomers 106021-96-9DP, conjugates 115538-80-2DP, conjugates 119260-99-0DP, conjugates 128202-62-0DP, conjugates 138087-94-2DP, conjugates 138111-96-3DP, conjugates 140841-47-0DP, conjugates 143748-29-2DP, conjugates 163045-82-7DP, conjugates 198195-84-5DP, conjugates 198195-85-6DP, conjugates 198195-86-7DP, conjugates 198195-87-8DP, conjugates 198195-90-3DP, palmitated 198351-89-2DP, conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)
IT 53678-77-6, Muramyldipeptide 129743-08-4 138655-13-7 138743-72-3 148719-64-6 174661-33-7 198195-88-9 198195-89-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or **vaccine**)

L53 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:667263 HCAPLUS
DN 127:322794
TI Property-affecting and/or property-exhibiting compositions for therapeutic and diagnostic uses
IN Rabbani, Elazar; Stavrianopoulos, Jannis G.; Donegan, James J.; Liu, Dakai; Kelker, Norman E.; Engelhardt, Dean L.
PA Enzo Therapeutics, Inc., USA
SO Can. Pat. Appl., 275 pp.
CODEN: CPXXEB
DT Patent
LA English
IC ICM C07H021-00
ICS A61K047-48; A61K031-70; A61K038-55
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 3
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2190304	AA	19970616	CA 1996-2190304	19961114
	EP 779365	A2	19970618	EP 1996-119961	19961212
	R: DE, FR, GB, IT				
	JP 09313190	A2	19971209	JP 1996-360043	19961216

PRAI US 1995-574443 19951215
AB Compns. useful for effecting and/or exhibiting changes in biol. functioning and processing in cells and biol. systems are provided which combine chem. modifications and/or ligand addns. with biol. functions in such a way as not to interfere substantially with the biol. functions. Such addnl. characteristics include nuclease resistance, targeting specific cells or cell receptors, and augmenting or decreasing interactions between the compns. and target cells. A title compn. may

constitute a nucleotide, nucleotide analog, nucleic acid, natural or synthetic polymer, ligand, or conjugate of a ligand with any of the preceding. For example, single-stranded DNA from a plasmid contg. a gene of interest is complexed with an allylamine phosphoramidite-contg. oligonucleotide primer (complementary to a region of the DNA distant from the gene of interest) which as been modified with trilactosyllysyllysine (prepn. given), and the primer is extended with Klenow enzyme to form completely double-stranded DNA. On exposure of target cells to this DNA, the galactose moieties on the DNA bind to receptors on the cells, resulting in transport of the DNA into the cells. In another embodiment, DNA for antisense RNA sequences to regions of the HIV genome were inserted into the U1 small nuclear RNA coding region and the DNA was used to transform U937 cells. The transformed cells were resistant to HIV infection, as shown by inhibition of virus replication and p24 **antigen** prodn.

ST polynucleotide conjugation ligand cell targeting; protein conjugation ligand cell targeting; HIV gene therapy; biopolymer cell targeting

IT Dipole
(-dipole interactions; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Bacteria (Eubacteria)
Eukaryote (Eukaryotae)
Prokaryote
(DNA of, conjugates with ligands; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Ribonucleoproteins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(RNA U1-contg.; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Ribonucleoproteins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(RNA U2-contg.; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Nucleotides, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analogs and derivs., DNA contg.; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Chimeric genes
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(animal, DNA-RNA; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT rev gene (microbial)
tat gene (microbial)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antisense DNA for; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(capped, genetic capping element for; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Genes (animal)
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chimeric, DNA-RNA; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Ligands
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugated, with nucleic acids; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Plasmids
(conjugates with ligands; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Biopolymers
Fatty acid esters
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(conjugates with nucleic acids; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Polyelectrolytes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with nucleic acids; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Fatty acids, biological studies
Polymers, biological studies
Proteins (specific proteins and subclasses)
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(conjugates, with nucleic acids; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Genes (microbial)
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(for T7 RNA polymerase, SV40 small t **antigen** gene intron insertion into; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Small t **antigen**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene for, insertion of intron of, into T7 RNA polymerase gene; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Glycoproteins (specific proteins and subclasses)
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp24; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Bond
Molecules
(hydrophobic; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Human immunodeficiency virus
(inhibitors; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Genetic elements
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(initiator; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT **Carbohydrates**, biological studies
Macromolecular compounds
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ligands; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Cell membrane
Cytoplasm
(localization to; property-affecting and/or property-exhibiting compns.

for therapeutic and diagnostic uses)
IT DNA
RNA
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Bacteriophage
Viroid
(nucleic acid of, conjugates with ligands; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Cell nucleus
(nucleic acid targeting to; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleic acid targeting with; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Animal virus
(nucleic acids of, conjugates with ligands; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Molecular recognition
(of cells; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT tRNA
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(primer, polymerase recognition site complementary to; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Adjuvants (immunological)
Animal cells
Anti-AIDS drugs
Antiviral agents
Bacteriophage SP6
Coliphage T7
DNA-RNA hybridization
Diagnosis
Drug targeting
Enterobacteria phage T3
Gene therapy
Hydrogen bond
Ionic bond
Stem-loop structure
Transformation (genetic)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Cationic polyelectrolytes
Cytokines
Growth factors (animal)
Hormones (animal), biological studies
Lymphokines
Matrix proteins
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Antisense DNA
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Antisense RNA
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT **CD4 (antigen)**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Oncogenes (animal)
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Phosphoproteins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Promoter (genetic element)
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Ribozymes
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Terminator (genetic element)
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT **Antigens**
Lectins
Receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Natural products
RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Intron (genetic element)
RL: REM (Removal or disposal); PROC (Process)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Polyadenylation signal (genetic element)
RL: REM (Removal or disposal); PROC (Process)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT Coenzymes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic

and diagnostic uses)
IT Enzymes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Fibronectins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Ribonucleoproteins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(small nuclear RNA-contg.; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Simian virus 40
(small t **antigen** gene intron of, insertion into T7 RNA polymerase gene; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Genetic elements
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suppressor element; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT Antibody conjugates
Monoclonal antibody conjugates
Polysaccharide conjugates
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(with nucleic acids; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 78310-71-1, DNA (coliphage T7 RNA polymerase gene)
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(SV40 small t **antigen** gene intron insertion into; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 9068-38-6, Reverse transcriptase
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(gene for, expression of; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 9012-90-2, DNA polymerase 9014-24-8, RNA polymerase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene for, expression of; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 195889-83-9 195889-84-0 195889-85-1
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insertion into T7 RNA polymerase gene-contg. plasmid; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 195891-45-3
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(insertion into T7 RNA polymerase gene; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 195889-86-2 195889-87-3 195889-88-4
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insertion into U1 small nuclear RNA gene; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)
IT 9004-10-8DP, Insulin, conjugates with oligo(T)

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT 37205-61-1, Proteinase inhibitor 195829-10-8D, DNA primer contg.
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT 52123-30-5, L-Lysyl-L-lysine dihydrochloride 55750-62-4 68528-80-3, Suberic acid bis(N-hydroxysuccinimide) ester 195829-07-3 195992-88-2 195992-89-3 195992-90-6 197431-06-4
RL: RCT (Reactant)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT 195829-08-4P 195829-09-5P 195992-84-8P 195992-87-1P 195992-91-7P 197526-74-2P 197526-75-3P 197526-76-4P 197526-77-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT **25104-18-1D**, Polylysine, derivs. 38000-06-5D, Polylysine, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

IT 9026-81-7, Nuclease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance to; property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

L53 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:640779 HCAPLUS
DN 127:306602
TI Prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy
IN Schlom, Jeffrey; Tsang, Kwong-Yok; Zaremba, Sam
PA United States Dept. of Health and Human Services, USA; Schlom, Jeffrey; Tsang, Kwong-Yok; Zaremba, Sam
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N015-57
ICS C12N009-64; A61K038-48; C12N005-10; C12N007-01; A61K039-00
CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9735021	A2	19970925	WO 1997-US4454	19970319

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9725359 A1 19971010 AU 1997-25359 19970319
EP 888456 A2 19990107 EP 1997-916850 19970319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
PRAI US 1996-618936 19960320
WO 1997-US4454 19970319

AB A prostate-specific **antigen** (PSA) oligo-**epitope** peptide is provided which comprises more than one PSA **epitope** peptide, which conforms to one or more human HLA class I motifs. The PSA oligo-**epitope** peptide in combination with various HLA-class I mols. or interactions with various T-cell receptors elicits PSA-specific cellular immune responses. The PSA oligo-**epitope** peptide is useful as an immunogen in the prevention or treatment of prostatic cancer, in the inhibition of prostatic cancer cells, and in the establishment and characterization of PSA-specific cytotoxic T-cell lines. Recombinant **vaccinia** virus is constructed contg. a DNA sequence encoding the PSA oligo-**epitope** peptide which is expressed on the surface of **antigen**-presenting or dendritic cells, thereby eliciting an immune response.

ST prostate specific **antigen epitope** peptide antitumor; **vaccinia** virus vector PSA **epitope** antitumor

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A11 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A24 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A26 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A28; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A3 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-B7 **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-A32 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-A **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-Aw68 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-B **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-B44 **antigen**, HLA-A32 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-B **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-B53 **antigen**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT HLA-C **antigen**

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-Cw3 **antigen**, HLA-A32 **antigen**;
prostate-specific **antigen** oligo-**epitope** peptide for
carcinoma therapy)
IT HLA-C **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-Cw4 **antigen**, HLA-A32 **antigen**;
prostate-specific **antigen** oligo-**epitope** peptide for
carcinoma therapy)
IT HLA-C **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(HLA-Cw5 **antigen**; prostate-specific **antigen** oligo-
epitope peptide for carcinoma therapy)
IT Exotoxin A
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Pseudomonas; prostate-specific **antigen** oligo-**epitope**
peptide for carcinoma therapy)
IT Adjuvants (immunological)
(QS21, pharmaceutical compns. contg.; prostate-specific **antigen**
oligo-**epitope** peptide for carcinoma therapy)
IT Adjuvants (immunological)
(Ribi, pharmaceutical compns. contg.; prostate-specific **antigen**
oligo-**epitope** peptide for carcinoma therapy)
IT DNA sequences
(for prostate-specific **antigen** oligo-**epitope**
peptide for carcinoma therapy)
IT Influenza virus
(immunoenhancing peptide; prostate-specific **antigen** oligo-
epitope peptide for carcinoma therapy)
IT Adjuvants (immunological)
(incomplete Freund's, pharmaceutical compns. contg.; prostate-specific
antigen oligo-**epitope** peptide for carcinoma therapy)
IT Protein sequences
(of prostate-specific **antigen** oligo-**epitope** peptide
for carcinoma therapy)
IT Alums
Interferons
Interleukin 12
Interleukin 2
Interleukin 6
Tumor necrosis factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. contg.; prostate-specific **antigen**
oligo-**epitope** peptide for carcinoma therapy)
IT **Antigen**-presenting cell
Antitumor agents
Dendritic cell
Epitope mapping
Epitopes
Immunostimulants
Plasmid vectors
Prostatic carcinoma
Virus vectors
(prostate-specific **antigen** oligo-**epitope** peptide
for carcinoma therapy)
IT Class I HLA **antigens**
HLA-A1 **antigen**
HLA-A2 **antigen**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)

(prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT Prostate-specific **antigen**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT Tetanus toxoid
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT Avipoxvirus
Baculoviridae
Capripoxvirus
Human adenovirus
Human papillomavirus
Orthopoxvirus
Simian virus 40
Suipoxvirus
Vaccinia virus
(vector; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT 160215-60-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PSA1 **epitope**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT 188191-49-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PSA3 **epitope**; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT 197394-50-6P 197394-51-7P
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT 50-18-0, Cyclophosphamide 83869-56-1, Colony-stimulating factor 2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. contg.; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT **25104-18-1**, Poly(L-lysine) 38000-06-5, Poly(L-lysine)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

IT 197146-50-2P 197146-51-3P 197146-52-4P 197146-53-5P 197146-54-6P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthetic oligo-**epitopic** construct; prostate-specific **antigen** oligo-**epitope** peptide for carcinoma therapy)

L53 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:504561 HCAPLUS
DN 127:233227
TI Preparation of a **multiple antigen glycopeptide** (MAG) carrying the Tn **antigen**. A possible approach to a synthetic **carbohydrate vaccine**
AU **Bay, Sylvie**; **Lo-Man, Richard**; Osinaga, Eduardo; Nakada, Hiroshi; **Leclerc, Claude**; **Cantacuzene, Daniele**
CS Unite de Chimie Organique, Institut **Pasteur**, Paris, Fr.
SO J. Pept. Res. (1997), 49(6), 620-625

pt 09/405,987

CODEN: JPERFA; ISSN: 1397-002X
PB Munksgaard
DT Journal
LA English
CC 15-2 (Immunochemistry)
AB The glycosidic tumor-assocd. Tn **antigen** was conjugated to a lysine backbone contg. a helper T-cell epitope to activate immune responses specific for some types of carcinomas. As opposed to traditional protein conjugates, this multiple **antigen glycopeptide** (MAG) offers the advantages of the lack of immunogenicity of the polylysine core and of accurate chem. definition. The MAG construction was assembled by conventional solid-phase peptide synthesis. The anal. of its **antigenicity** demonstrated that the Tn **antigen** on the MAG is recognized by Tn-specific monoclonal antibodies.
ST multiple **antigen glycopeptide** Tn determinant
IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Tn **antigen**, determinant; multiple **antigen glycopeptide** carrying Tn determinant in relation to)
IT Monoclonal antibodies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(binding to multiple **antigen glycopeptide** carrying Tn determinant by)
IT Synthetic **vaccines**
(multiple **antigen glycopeptide** carrying Tn determinant in relation to)
IT Multiple **antigen** peptides
RL: BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(multiple **antigen glycopeptide** carrying Tn determinant in relation to)
IT 120204-22-0
RL: RCT (Reactant)
(in prepn. of multiple **antigen glycopeptide** with Tn **antigenicity**)
IT 195159-17-2P
RL: BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. and **antigenicity** of)
IT 155569-99-6P 162784-50-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conjugation to Tn determinant)
IT 195059-79-1P 195059-80-4P 195159-16-1P
RL: BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. and monoclonal antibody binding to)
IT 195059-78-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and peptide conjugation of)

L53 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:440265 HCAPLUS
DN 127:49214
TI Tumor **vaccine** and process for the preparation thereof
IN Schmidt, Walter; Birnstiel, Max; Schweighoffer, Tamas; Steinlein, Peter; Buschle, Michael
PA Boehringer Ingelheim International Gmbh, Germany; Schmidt, Walter; Birnstiel, Max; Schweighoffer, Tamas; Steinlein, Peter; Buschle, Michael

SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C12N005-08
ICS A61K035-14; A61K035-26; A61K039-12; A61K038-19; C07K014-725
CC 15-2 (Immunochemistry)
Section cross-reference(s): 14
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9719169	A1	19970529	WO 1996-EP5126	19961121
	W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, JP, KR, KZ, LT, LV, MX, NZ, PL, RO, RU, SG, SK, TR, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19543649	A1	19970528	DE 1995-19543649	19951123
	DE 19543649	C2	19980129		
	DE 19607044	A1	19970828	DE 1996-19607044	19960224
	AU 9676947	A1	19970611	AU 1996-76947	19961121
	EP 866851	A1	19980930	EP 1996-939870	19961121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI				

PRAI DE 1995-19543649 19951123
DE 1996-19607044 19960224
WO 1996-EP5126 19961121

AB The invention relates to a tumor **vaccine** and a process for the prepn. thereof. The tumor **vaccine** contains tumor cells, at least a portion of which has at least one MHC-I-haplotype of the patient on the cell surface, and which have been loaded in such a manner with one or more peptides bonding to the MHC-I-mol. that the tumor cells are recognized as foreign within the context of the peptides by the patient's immune system and trigger a cellular immune response. Loading takes place in the presence of a polycation such as polylysine. Thus, melanoma metastases were cured in DBA/2 mice with a **vaccine** consisting of melanoma cells loaded with a xenopeptide (LFEAIEGFI).

ST tumor cell **vaccine antigen** peptide HLA

IT Genes (animal)
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(for cytokines; in human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Cell membrane
Cell-mediated immunity
Colon carcinoma
Fibroblast
Melanoma inhibitors
Metastasis inhibitors
Tumors (animal)
Vaccines
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Polyvalent cations
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Class I HLA **antigens**
H-2Kb **antigen**
H-2Kd **antigen**
Tumor-associated **antigen**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT **CD4**-positive T cell
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes effect on)

IT Plasmids
(in human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Cytokines
Interferon .gamma.
Interleukin 2
Transferrins
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(in human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Proteins (general), biological studies
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(influenza virus; human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT Influenza virus
(proteins; human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT **25104-18-1**, Polylysine
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

IT 132326-73-9P 181213-39-8P 191111-61-2P 191230-12-3P
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(human tumor **vaccines** with tumor **antigen**-derived peptides and MHC class I haplotypes)

L53 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1996:718167 HCAPLUS
DN 126:6439
TI AIDS **vaccine** derived from a HIV envelope protein with improved immunity
IN Okuda, Kenji
PA Terumo Corp, Japan; Okuda Kenji
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K039-385
ICS A61K039-21

ICI A61K039-385, A61K039-21
CC 15-2 (Immunochemistry)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08231423	A2	19960910	JP 1995-38835	19950227

AB Provided is an AIDS **vaccine** prepd. by linking the V3 domain of HIV envelope protein gp120 with other peptides using the branching lysine oligomers to improve its immunity against a variety of HIV mutants. The V3 domain peptides may be linked to the HIV-derived T-cell **epitopes** or **CD4**-binding domains. Synthetic prepn. of a loop peptide comprised of the consensus V3 PND peptide (22 amino acids) and the **CD4**-binding domain (13 amino acids) as well as the polymn. of the loop peptide with poly-lysine (approx. 8 kDt) were shown and the protecting effects of the **vaccine** was obsd.
ST AIDS **vaccine** HIV gp120 V3 polylysine
IT AIDS (disease)
Human immunodeficiency virus 1
Immunostimulation
Vaccines
(AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)
IT **CD4** (**antigen**)
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**CD4**-binding domain; AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)
IT Conformation
(HIV gp120 V3 domain; AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)
IT **Antigens**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(T-cell **epitope**; AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)
IT Glycoproteins (specific proteins and subclasses)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp120; AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)
IT **25104-18-1**, Polylysine
RL: MOA (Modifier or additive use); USES (Uses)
(AIDS **vaccine** consisting of HIV gp120 V3 domain linked with other proteins via polylysine with improved immunity)

L53 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1996:696109 HCAPLUS
DN 125:338936
TI Immunological evaluation of the lipid-core-peptide (LCP) adjuvant/carrier system
AU Toth, I.; Flinn, N.; Gibbons, W. A.; Good, M.; Hayman, W.; Brown, F.
CS School Pharmacy, University London, London, WC1N 1AX, UK
SO Pept.: Chem., Struct. Biol., Proc. Am. Pept. Symp., 14th (1996), Meeting Date 1995, 810-811. Editor(s): Kaumaya, Pravin T. P.; Hodges, Robert S. Publisher: Mayflower Scientific, Kingswinford, UK.
CODEN: 63NTAF

DT Conference
LA English
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 15
AB A novel lipid-core-peptide (LCP) system is developed by incorporating lipidic amino acids into the polylysine system. High antipeptide antibody titers in sera raised against an LCP-**epitope** of OMP of Chlamydia trachomatis, without using conventional adjuvants.
ST immunol lipid peptide adjuvant carrier **vaccine**
IT Antibodies
Vaccines
Lipids, biological studies
Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunol. evaluation of lipid-core-peptide adjuvant/carrier system)
IT Immunostimulants
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adjuvants, immunol. evaluation of lipid-core-peptide adjuvant/carrier system)
IT Pharmaceutical dosage forms
(carriers, immunol. evaluation of lipid-core-peptide adjuvant/carrier system)
IT **25104-18-1**, Polylysine 38000-06-5, Polylysine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunol. evaluation of lipid-core-peptide adjuvant/carrier system)

L53 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1996:50670 HCAPLUS
DN 124:115446
TI Synthetic peptide compositions with immunoreactivities to antibodies to HTLV and as **vaccines**
IN Wang, Chang Y.
PA United Biomedical, Inc., USA
SO U.S., 28 pp. Cont.-in-part of U.S. Ser. No. 469, 721, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM G01N033-53
NCL 435005000
CC 15-2 (Immunochemistry)
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5476765	A	19951219	US 1992-901874	19920622
	US 4833071	A	19890523	US 1987-1885	19870109
	US 5681696	A	19971028	US 1995-457865	19950601

PRAI US 1987-1885 19870109
US 1989-297635 19890113
US 1990-469721 19900124
US 1990-469291 19900124
US 1992-901874 19920622
OS MARPAT 124:115446
AB The present invention relates to a method for the detection HTLV-I and/or HTLV-II reactive antibodies and diagnosis of ATL (adult T cell leukemia/lymphoma) condition by the use of chem. synthesized peptide compns. The peptide compns. comprise peptides having amino acid sequences corresponding to transmembrane and external segments of the envelope protein of HTLV-I/HTLV-II and mixts. thereof. The peptide compns. are highly immunoreactive with antibodies to HTLV in sera. The present

invention further relates to a method for the simultaneous detection and diagnosis of ATL, HTLV-I and/or HTLV-II infection and Acquired Immune Deficiency Syndrome (AIDS) by the use of chem. synthesized HTLV peptide compns. in conjunction with a chem. synthesized HIV (1 and 2) peptide compn. The present invention also provides a simple method to differentiate between HTLV-I and HTLV-II infections. The detection method includes an ELISA (ELISA), an immunoradiometric assay (IRMA), and other forms of immunoassay procedures such as enzyme immuno blotting assay on nitrocellulose paper and an agglutination assay using the peptide compn. as the **antigen**. The preferred detection method is ELISA. In example, immunoassays with the synthetic peptides were demonstrated, and octameric peptides on a branching lysine core polymer were synthesized and tested in an ELISA against HTLV-I and HTLV-II pos. sera.

ST HTLV peptide **vaccine** antibody blood analysis; immunoassay HTLVI HTLVII AIDS HTLV **antigen**; adult T cell leukemia lymphoma

IT **Antigens**
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HTLV peptide; synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Polymers, biological studies
Proteins, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugate as carrier; synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Acquired immune deficiency syndrome
Blood analysis
Protein sequences
Vaccines
(synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Antibodies
RL: ANT (Analyte); ANST (Analytical study)
(synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Leukemia
Lymphoma
(T-cell, adult, synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Virus, animal
(human T-cell leukemia, **antigenic** peptide; synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Virus, animal
(human T-cell leukemia type I, synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT Virus, animal

(human T-cell leukemia type II, synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT 172993-87-2P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT 104880-81-1 112003-56-2 122666-17-5 123249-14-9 123249-16-1
123249-18-3 132809-55-3 132844-95-2 132865-40-8 134546-29-5
134546-30-8 134546-42-2 138067-22-8 138067-25-1 172993-83-8
172993-84-9 172993-85-0 172993-86-1 173047-87-5
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

IT **25104-18-1DP**, Polylysine, octamers 38000-06-5DP, Polylysine, octamers
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthetic **antigenic** peptide linked to; synthetic HTLV **antigen** peptide **epitopes** for immunoassay of anti-HTLV antibody for diagnosing and differentiating ADIS and HTLV-I and HTLV-II infection and as **vaccine**)

L53 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:963703 HCAPLUS
DN 123:332097
TI Compacted nucleic acids and their delivery to cells for gene therapy
IN Hanson, Richard W.; Perales, Joseph C.; Ferkol, Thomas W., Jr.
PA Ohio University, USA
SO PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N015-87
ICS A61K047-48; A61K048-00; C07H021-00
CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 1, 63
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9525809	A1	19950928	WO 1995-US3677	19950323
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2186118	AA	19950928	CA 1995-2186118	19950323
	AU 9521276	A1	19951009	AU 1995-21276	19950323
	AU 696455	B2	19980910		
	EP 752005	A1	19970108	EP 1995-914173	19950323

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 10503469 T2 19980331 JP 1995-524826 19950323
US 5877302 A 19990302 US 1997-716415 19970212
PRAI US 1994-216534 19940323
WO 1995-US3677 19950323

AB Nucleic acids are compacted, substantially without aggregation, to facilitate their uptake by target cells of an organism to which the compacted material is administered. The nucleic acids may achieve a clin. effect as a result of gene expression, hybridization to endogenous nucleic acids whose expression is undesired, or site-specific integration so that a target gene is replaced, modified or deleted. The targeting may be enhanced by means of a target-cell-binding moiety. The nucleic acid is preferably compacted to a condensed state.

ST nucleic acid compaction animal gene therapy; DNA compacted uptake animal cell therapy; receptor cell uptake compacted nucleic acid; liposome compacted nucleic acid transfer therapy

IT Animal cell
Animal
Cytoskeleton
Liposome
Macrophage
Nucleic acid hybridization
Transcription, genetic
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Enzymes
Proteins, biological studies
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Receptors
Toxins
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Deoxyribonucleoproteins
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Gene, animal
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Immunoglobulin receptors
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT Ribonucleoproteins
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

IT **Antigens**
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**CD4**, compacted nucleic acids and their delivery to cells for gene therapy)

IT Receptors
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(Ig, compacted nucleic acids and their delivery to cells for gene therapy)
IT Biological transport
(absorption, compacted nucleic acids and their delivery to cells for gene therapy)
IT Lipoproteins
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(apo-, E, complexes, with nucleic acids; compacted nucleic acids and their delivery to cells for gene therapy)
IT Agglutinins and Lectins
Antibodies
Lactoferrins
Transferrins
Albumins, biological studies
Carbohydrates and Sugars, biological studies
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(complexes, with nucleic acids; compacted nucleic acids and their delivery to cells for gene therapy)
IT Deoxyribonucleic acids
Nucleic acids
Ribonucleic acids
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(complexes, with target-cell-binding carrier mols.; compacted nucleic acids and their delivery to cells for gene therapy)
IT Animal metabolism
(disorder, compacted nucleic acids and their delivery to cells for gene therapy)
IT Therapeutics
(geno-, compacted nucleic acids and their delivery to cells for gene therapy)
IT Glycoproteins, specific or class
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(gp120, complexes, with nucleic acids; compacted nucleic acids and their delivery to cells for gene therapy)
IT Recombination, genetic
(homologous, compacted nucleic acids and their delivery to cells for gene therapy)
IT Recombination, genetic
(integration, compacted nucleic acids and their delivery to cells for gene therapy)
IT Proteins, specific or class
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ion channel-forming, compacted nucleic acids and their delivery to cells for gene therapy)
IT Deoxyribonucleic acids
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(methylphosphonate-linked, complexes, with target-cell-binding carrier mols.; compacted nucleic acids and their delivery to cells for gene therapy)
IT Cations
(polyvalent, complexes, with nucleic acids; compacted nucleic acids and their delivery to cells for gene therapy)
IT Transformation, genetic

(transgenosis, compacted nucleic acids and their delivery to cells for gene therapy)

IT Proteins, specific or class
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(transporting, compacted nucleic acids and their delivery to cells for gene therapy)

IT Lymphokines and Cytokines
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(tumor necrosis factor, complexes, with nucleic acids; compacted nucleic acids and their delivery to cells for gene therapy)

IT 7647-14-5, Salt, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chaotropic; compacted nucleic acids and their delivery to cells for gene therapy)

IT 59-23-4D, Galactose, complexes with nucleic acids 63-42-3D, Lactose, complexes with nucleic acids 3458-28-4D, Mannose, complexes with nucleic acids 9002-61-3D, Chorionic gonadotropin, complexes with nucleic acids 9002-62-4D, Prolactin, complexes with nucleic acids 9002-67-9D, Luteinizing hormone, complexes with nucleic acids 9002-68-0D, Follicle stimulating hormone, complexes with nucleic acids 9004-10-8D, Insulin, complexes with nucleic acids 9007-92-5D, Glucagon, complexes with nucleic acids **25104-18-1D**, Polylysine, complexes with nucleic acids 38000-06-5D, complexes with nucleic acids 62229-50-9D, Epidermal growth factor, complexes with nucleic acids
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compacted nucleic acids and their delivery to cells for gene therapy)

L53 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:78661 HCAPLUS
DN 122:177804
TI **Carbohydrate** receptor-mediated gene transfer to human T leukemic cells
AU Thurnher, Martin; Wagner, Ernst; Clausen, Henrik; Mechtler, Karl; Rusconi, Sandro; Dinter, Andre; Birnstiel, Max L.; Berger, Eric G.; Cotten, Matt
CS Institute of Physiology, University of Zurich, Zurich, CH 8057, Switz.
SO Glycobiology (1994), 4(4), 429-35
CODEN: GLYCE3; ISSN: 0959-6658
DT Journal
LA English
CC 1-6 (Pharmacology)
Section cross-reference(s): 15, 63
AB The mucin-type **carbohydrate** Tn cryptantigen (GalNAc.alpha.1-O-Ser/Thr, where GalNAc is N-acetyl-D-galactosamine) is expressed in many carcinomas, in hemopoietic disorders including the Tn syndrome, and on human immunodeficiency virus (HIV) coat glycoproteins, but is not expressed on normal, differential cells because of the expression of a Tn-processing galactosyltransferase. Using Jurkat T leukemic cells which express high levels of Tn **antigen** due to deficient Tn galactosylation, the authors have established the Tn **antigen** -mediated gene transfer and demonstrate the considerable efficiency of this approach. The authors used poly(L-lysine) conjugates of the monoclonal antibody 1E3 directed against the Tn **antigen** to deliver the luciferase and .beta.-galactosidase reporter genes to Jurkat cells by receptor-mediated endocytosis. Addn. of unconjugated 1E3 reduced transfection efficiency in a concn.-dependent manner and incubation with

free GalNAc abolished DNA transfer completely, indicating that gene delivery is indeed mediated by the Tn **antigen**. Pre-treatment of Jurkat cells with Vibrio cholerae sialidase, which uncovers addnl. Tn **antigens**, resulted in an improvement of gene transfection. Both human and chicken adenovirus particles attached to the DNA/polylysine complex strongly augmented transgene expression. When the .beta.-galactosidase (lacZ) gene was delivered to Jurkat cells by Tn-mediated endocytosis, up to 60% of the cells were pos. in the cytochem. stain using 5-bromo-4-chloro-3-indolyl-.beta.-D-galactopyranoside (X-gal) as a chromogenic substrate. The efficiency of the transferrin receptor-mediated DNA uptake into Jurkat cells was comparatively low, although these cells were shown to express considerable amts. of transferrin receptor. The authors show here that a mucin-type **carbohydrate antigen** mediates highly efficient DNA uptake by endocytosis into Jurkat T cells. This method represents a 50-fold improvement of Jurkat cell transfection efficiency over other phys. gene transfer techniques. Specific gene delivery to primary cancer cells exhibiting Tn **epitopes** may esp. be desirable in immunotherapy protocols.

ST Tn **antigen** gene transfer leukemia

IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Tn; **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Neoplasm inhibitors
(**carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Transferrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(receptor; **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Receptors
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(transferrin; **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Transformation, genetic
(transferrinfection; **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Virus, animal
(adeno-, **carbohydrate** receptor-mediated gene transfer to human T leukemic cells enhancement by adenoviruses)

IT Therapeutics
(immuno-, **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, 1E3, conjugates with poly(lysine); **carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

IT **25104-18-1D**, Poly(L-lysine), conjugates with monoclonal antibody 1E3 38000-06-5D, Poly(L-lysine), conjugates with monoclonal antibody 1E3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**carbohydrate** receptor-mediated gene transfer to human T leukemic cells)

L53 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 1999 ACS
AN 1988:129245 HCAPLUS

DN 108:129245
TI The L2/HNK-1 **carbohydrate** of neural cell adhesion molecules is involved in cell interactions
AU Kuenemund, Volker; Jungalwala, Firoze B.; Fischer, Guenther; Chou, Denise K. H.; Keilhauer, Gerhard; Schachner, Melitta
CS Dep. Neurobiol., Univ. Heidelberg, Heidelberg, D-6900, Fed. Rep. Ger.
SO J. Cell Biol. (1988), 106(1), 213-23
CODEN: JCLBA3; ISSN: 0021-9525
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
AB It was investigated whether the L2/HNK-1 **carbohydrate epitope**, expressed by 2 unusual glycolipids and several neural adhesion mols., including L1, neural cell adhesion mol., J1, and the myelin-assocd. glycoprotein, is involved in adhesion. Monoclonal L2 antibodies, the LI/HNK-1-reactive, sulfate-3-glucuronyl residue-carrying glycolipids (L2 glycolipid), and a tetrasaccharide derived from the L2 glycolipid (L2 tetrasaccharide) were added to microexplant cultures of early postnatal mouse cerebellum, and cell migration and process extension were monitored. On the substrate poly-D-lysine, Fab fragments of L2 antibodies, L2 glycolipid, and L2 tetrasaccharide inhibited outgrowth of astrocytic processes and migration of cell bodies, but only L2 glycolipid and L2 tetrasacharide reduced neurite outgrowth. On laminin, L2 antibodies, L2 glycolipid, and L2 tetrasaccharide inhibited outgrowth of astrocytic processes. Addnl., L2 glycolipid and L2 tetrasaccharide inhibited cell migration and neurite outgrowth. Several neg. charged glycolipids, lipids, and saccharides were tested for control and found to have no effect on outgrowth patterns, except for sulfatide and heparin, which modified outgrowth patterns in a similar fashion as L2 glycolipid and L2 tetrasaccharide. On astrocytes none of the tested compds. interfered with explant outgrowth. In short-term adhesion assays L2 glycolipid, sulfatide, and heparin inhibited adhesion of neural cells to laminin L2 glycolipid and sulfatide interfered with neuron-to-astrocyte and astrocyte-to-astrocyte adhesion, but not with neuron-neuron adhesion. The most straightforward interpretation of these observations is that L2-HNK-1 **carbohydrate** and the sulfated **carbohydrates**, sulfatide and heparin, act as ligands in cell adhesion.
ST neuron adhesion L2 HNK1 **carbohydrate**; astrocyte adhesion L2 HNK1 **carbohydrate**
IT **Carbohydrates** and Sugars, biological studies
RL: BIOL (Biological study)
(L2/HNK-1 reactive, in brain cerebellum cell adhesion)
IT Nerve
(adhesion of, of brain cerebellum, L2/HNK-1 **carbohydrate** in)
IT Sulfatides
RL: BIOL (Biological study)
(brain cerebellum cell adhesion response to)
IT Laminins
RL: BIOL (Biological study)
(brain cerebellum cell outgrowth on, L2/HNK-1 **carbohydrate** in)
IT Neuroglia
(astroglia, adhesion of, L2/HNK-1 **carbohydrate** in)
IT Nerve
(axon, outgrowth of, of brain cerebellum, L2/HNK-1 **carbohydrate** in)
IT Adhesion
(bio-, of brain cerebellum cells, L2/HNK-1 **carbohydrate** in)
IT Brain

(cerebellum, adhesion of cells of, L2/HNK-1 **carbohydrate** in)
IT 9005-49-6, Heparin, biological studies 104625-47-0 106907-69-1
113440-59-8
RL: BIOL (Biological study)
(brain cerebellum cell adhesion response to)
IT **26853-89-4**, Poly-D-lysine 26913-90-6, Poly-D-lysine
RL: BIOL (Biological study)
(brain cerebellum cell outgrowth on, L2/HNK-1 **carbohydrate** in)

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DICTIONARY FILE UPDATES: 04 AUG 99 HIGHEST RN 230316-00-4

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

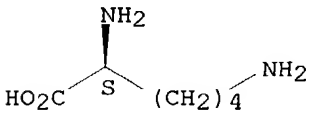
=> d l24 ide can tot

L24 ANSWER 1 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 137243-07-3 REGISTRY
CN L-Lysine, nonamer (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **(C6 H14 N2 O2)9**
CI **PMS**
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:233494

L24 ANSWER 2 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 137243-06-2 REGISTRY
CN L-Lysine, trimer (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **(C6 H14 N2 O2)3**
CI **PMS**

SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 56-87-1
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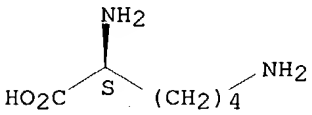
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

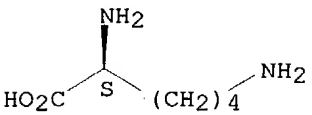
REFERENCE 1: 115:233494

L24 ANSWER 3 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 33056-43-8 REGISTRY
CN L-Lysine, dimer (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **(C6 H14 N2 O2)2**
CI **PMS**

CM 1

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.



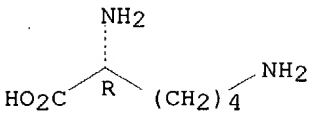
L24 ANSWER 4 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 26853-89-4 REGISTRY
CN D-Lysine, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Lysine, D-, peptides (8CI)
OTHER NAMES:
CN Poly(D-lysine)
FS STEREOSEARCH
MF **(C6 H14 N2 O2)x**
CI **PMS, COM**
PCT Polyamide, Polyamide formed
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CBNB, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXLINE, TOXLIT, USPATFULL

CM 1

CRN 923-27-3

CMF C6 H14 N2 O2

Absolute stereochemistry.



251 REFERENCES IN FILE CA (1967 TO DATE)
67 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
251 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:35863

REFERENCE 2: 130:322432

REFERENCE 3: 130:294457

REFERENCE 4: 130:261423

REFERENCE 5: 130:234347

REFERENCE 6: 130:194564

REFERENCE 7: 130:183115

REFERENCE 8: 130:149961

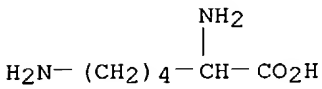
REFERENCE 9: 130:107067

REFERENCE 10: 129:332221

L24 ANSWER 5 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 26714-32-9 REGISTRY
CN Lysine, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN DL-Lysine, homopolymer
CN Lysine, DL-, peptides (8CI)
OTHER NAMES:
CN Poly(DL-lysine) homopolymer
CN Poly-dl-lysine
CN Poly-DL-lysine
MF **(C6 H14 N2 O2)x**
CI **PMS, COM**
PCT Polyamide, Polyamide formed
LC STN Files: BIOSIS, CA, CAPLUS, CSCHEM, IPA, TOXLINE, TOXLIT, USPATFULL

CM 1

CRN 70-54-2
CMF C6 H14 N2 O2



69 REFERENCES IN FILE CA (1967 TO DATE)
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REFERENCE 1: 130:252615

REFERENCE 2: 130:149961

REFERENCE 3: 130:92190

REFERENCE 4: 129:331058

REFERENCE 5: 126:321066

REFERENCE 6: 125:317395

REFERENCE 7: 125:126207

REFERENCE 8: 125:80006

REFERENCE 9: 124:251571

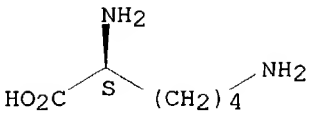
REFERENCE 10: 124:3808

L24 ANSWER 6 OF 6 REGISTRY COPYRIGHT 1999 ACS
RN 25104-18-1 REGISTRY
CN L-Lysine, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Lysine, L-, peptides (8CI)
OTHER NAMES:
CN L-Lysine polymer
CN Lysine homopolymer
CN Lysine polymer
CN Poly(L-lysine)
CN Poly-l-lysine
CN Polylysine
FS STEREOSEARCH
DR 55539-17-8
MF **(C6 H14 N2 O2)x**
CI **PMS, COM**
PCT Polyamide, Polyamide formed
LC STN Files: AGRICOLA, AIDSLINE, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, CEN, CHEMCATS, CIN, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PIRA, PROMT, TOXLINE, TOXLIT, TULSA, USPATFULL, VETU
(*File contains numerically searchable property data)

CM 1

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.



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957 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3978 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:78248

REFERENCE 2: 131:73948

REFERENCE 3: 131:70859

REFERENCE 4: 131:67770

REFERENCE 5: 131:56048

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L59          30 S L58 AND ?CONJUGAT?
L60          40 S L57,L59
L61           6 S L60 AND EPITOP?
L62          16 S L60 AND VACCIN?
L63           9 S L60 AND 15/SC
L64          17 S L61-L63
L65          23 S L60 NOT L64
L66          40 S L64,L65
                SEL HIT RN

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FILE LAST UPDATED: 4 Aug 1999 (19990804/ED)

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L66 ANSWER 1 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:166528 HCAPLUS
DN 130:213676
TI polymer-phenylboronic acid **conjugates** for prevention of adhesions in biological tissues
IN Hubbell, Jeffrey A.; Winblade, Natalie D.; Elbert, Donald L.
PA California Institute of Technology, USA
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9910022	A2	19990304	WO 1998-US17754	19980827
	WO 9910022	A3	19990610		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9890365	A1	19990316	AU 1998-90365	19980827
PRAI	US 1997-56854		19970827		
	WO 1998-US17754		19980827		

AB The invention discloses materials that adsorb readily to the surfaces of body tissues in situ and provide a steric barrier between such tissues, so that tissue adhesions, which typically form following surgical procedures, are minimized. These materials contain a polymer of hydrophilic mols. such as polyethylene glycol (PEG) bound to a polymer that spontaneously adsorbs to biol. tissue such as phenylboronic acid (PBA). The PEG-PBA co-polymer can be formed in a variety of geometries. The materials can also be used to coat prosthetics and other implants. PEG was grafted to a

peptide-PBA compd. to obtain a **conjugate** contg. 1.7 PBA moieties/peptide.

IT **220999-37-1**
RL: RCT (Reactant)
(polymer-phenylboronic acid **conjugates** for prevention of adhesions in biol. tissues)

IT **220999-39-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(polymer-phenylboronic acid **conjugates** for prevention of adhesions in biol. tissues)

L66 ANSWER 2 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:81582 HCAPLUS
DN 130:134201
TI Biologically active peptides with reduced toxicity in animals and a method for preparing same
IN Kari, U. Prasad; Williams, Taffy J.; McLane, Michael
PA Magainin Pharmaceuticals Inc., USA
SO PCT Int. Appl., 201 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9903488	A2	19990128	WO 1998-US14610	19980715
	WO 9903488	A3	19990408		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9883005	A1	19990210	AU 1998-83005	19980715
PRAI	US 1997-893006		19970715		
	WO 1998-US14610		19980715		

OS MARPAT 130:134201
AB Biol. active peptides with reduced toxicity, and methods of prepg. them, are provided. The peptides, which can be unsubstituted or N-terminal substituted, have formula (T)(W)NX (X = biol. active amphiphilic ion channel-forming peptide or protein; T = H, lipophilic moiety; W = H, T). Preferably T is RC(O) (R = C2-10 alkyl or arom. or alkylarom.). T is preferably an octanoyl group. The peptides and proteins of the invention have improved antimicrobial and anti-tumor biol. activity while exhibiting reduced toxicity. A preferred method of reducing toxicity involves the formation of related methane sulfonate derivs. or analogs. Addnl., the compds. of the invention may be used to treat sepsis, septic shock, and lung infections, such as those occurring in cystic fibrosis.

IT **169201-37-0 169201-38-1**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides with reduced toxicity, prepn. method, and therapeutic use)

L66 ANSWER 3 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:77590 HCAPLUS
DN 130:152551
TI Modified immunogenic pneumolysin compositions as **vaccines**
IN Minetti, Conceicao; Michon, Francis; Pullen, Jeffrey K.; Polvino-Bodnar, Maryellen; Liang, Shu-Mei; Tai, Joseph Y.
PA North American Vaccine, Inc., USA
SO PCT Int. Appl., 116 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9903884	A2	19990128	WO 1998-US14716	19980721
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9884078	A1	19990210	AU 1998-84078	19980721

PRAI US 1997-53306 19970721
US 1998-73456 19980202
US 1998-345697 19980202
WO 1998-US14716 19980721

AB This invention relates to modified pneumolysin polypeptides that retain the immunogenic nature of pneumolysin but have reduced or undetectable hemolytic activity compared to native pneumolysin. The invention also provides a method for generating novel pneumolysin variants with these desired characteristic properties. The invention also provides immunogenic compns. useful as pharmaceutical compns. including **vaccines** in which non-toxic, modified pneumolysin is used to stimulate protective immunity against Streptococcus pneumoniae. The **vaccines** may be compns. in which the modified pneumolysin in **conjugated** to bacterial **polysaccharides** or may be carried on an attenuated viral vector. In addn., the invention also provides a method of using the non-toxic, modified pneumolysin toxoid in order to stimulate antibodies against Streptococcus pneumoniae in a treated individual which are then isolated and transferred to a second individual, thereby conferring protection against Streptococcus pneumoniae in the second individual. Prepd. and tested for immunogenicity were polypeptides pNVJ1, pNVJ20, pNVJ22, pNVJ45, pNVJ56, pNVJ103, pNVJ207, pNVJ111, and pNVJ211 and corresponding nucleic acid sequences.

IT **220275-18-3 220275-20-7 220275-21-8**
220275-22-9 220275-23-0 220275-24-1
220275-25-2 220275-26-3 220275-28-5
RL: PRP (Properties)
(amino acid sequence; hemolytic activity-attenuated immunogenic pneumolysin **conjugate** with bacterial **polysaccharide** as **vaccines**)

L66 ANSWER 4 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:682407 HCAPLUS
DN 129:311721
TI Serogroup-specific nucleotide sequences and Neisseria meningitidis serotyping and preparation of **vaccines**
IN Stephens, David S.; Swartley, John S.
PA Emory University, USA
SO PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9845312 A1 19981015 WO 1998-US6946 19980409
W: AU, CA, JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9869561 A1 19981030 AU 1998-69561 19980409
PRAI US 1997-69885 19970409
US 1997-936107 19970923
WO 1998-US6946 19980409

AB The present disclosure provides specific nucleotide sequences and diagnostic methods for prototype serogroup A, B, C, Y and W-135 strains of Neisseria meningitidis. Due to capsule switching in vivo, closely related virulent meningococcal clones may not be recognized by traditional serogroup-based surveillance, and these strains can escape **vaccine** -induced or natural protective immunity by capsule switching. The invention provides recombinant meningococcal strains, recombinant DNA constructs and immunol. prepns. useful as diagnostic probes for detection and diagnosis of meningococcal diseases, screening for specific meningococcal serogroups and broad based immunizations with multivalent capsular **polysaccharide conjugate vaccines**.
The sequence of DNA located between the ctrA and galE genes of N. meningitidis serogroup A was detd. This region contains a cassette of four genes responsible for the prodn. of the capsular **polysaccharide** from UDP-N-acetylglucosamine. The serogroup B, C, Y and W-135 N. meningitidis contain different genes in this region: all contain synX, synB and synC, while other syn genes are unique to the particular serotype. The intergenic sequences between ctrA and ORF1 for serotype A and between ctrA and synX for serotypes B, C, Y and W-135 are different and may be used to differentiate these two groups. Similarly, the syn genes following synC may be used to differentiate serotypes B, C, Y and W-135. Thus, the meningococcal capsular serogroups are detd. by specific genetic biosynthesis cassettes that insert between the ctrA operon and galE. A serogroup C N. meningitidis strain was converted to serogroup B by homologous recombination of sequences encoding the serogroup B-specific capsule polymerase (synD).

IT **206456-03-3**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; serogroup-specific nucleotide sequences and Neisseria meningitidis serotyping and prepn. of **vaccines**)

L66 ANSWER 5 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:681149 HCAPLUS
DN 130:48266
TI Characterization of multiple regions involved in replication and mobilization of plasmid pNZ4000 coding for **exopolysaccharide** production in Lactococcus lactis
AU Van Kranenburg, Richard; De Vos, Willem M.
CS Microbial Ingredients Section, NIZO Food Research, Ede, 6718 ZB, Neth.
SO J. Bacteriol. (1998), 180(20), 5285-5290
CODEN: JOBAAY; ISSN: 0021-9193
PB American Society for Microbiology
DT Journal
LA English
AB We characterized the regions involved in replication and mobilization of the 40-kb plasmid pNZ4000, encoding **exopolysaccharide** (EPS) prodn. in Lactococcus lactis NIZO B40. The plasmid contains four highly conserved replication regions with homologous rep genes (repB1, repB2, repB3, and repB4) that belong to the lactococcal theta replicon family. Subcloning of each replicon individually showed that all are functional

and compatible in L. lactis. Plasmid pNZ4000 and genetically labeled derivs. could be transferred to different L. lactis strains by **conjugation**, and pNZ4000 was shown to be a mobilization plasmid. Two regions involved in mobilization were identified near two of the replicons; both included an oriT sequence rich in inverted repeats. **Conjugative** mobilization of the nonmobilizable plasmid pNZ124 was promoted by either one of these oriT sequences, demonstrating their functionality. One oriT sequence was followed by a mobA gene, coding for a trans-acting protein, which increased the frequency of **conjugative** transfer 100-fold. The predicted MobA protein and the oriT sequences show protein and nucleotide similarity, resp., with the relaxase and with the inverted repeat and nic site of the oriT from the Escherichia coli plasmid R64. The presence on pNZ4000 of four functional replicons, two oriT sequences, and several insertion sequence-like elements strongly suggests that this EPS plasmid is a naturally occurring cointegrate.

IT **217308-27-5**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(amino acid sequence; of multiple regions involved in replication and mobilization of plasmid pNZ4000 of Lactococcus lactis)

IT **217308-18-4 217308-24-2 217308-26-4**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; of multiple regions involved in replication and mobilization of plasmid pNZ4000 of Lactococcus lactis)

L66 ANSWER 6 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:668010 HCAPLUS
DN 129:306499
TI BAL C-tail drug delivery molecules
IN Tang, Jordan J. N.; Wang, Chi-Sun
PA Oklahoma Medical Research Foundation, USA
SO U.S., 16 pp. Cont.-in-part of U.S. 5,696,087.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5821226	A	19981013	US 1995-482262	19950607
	US 5696087	A	19971209	US 1994-347718	19941201
	WO 9617054	A1	19960606	WO 1995-US15647	19951201
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2206526	AA	19960606	CA 1995-2206526	19951201
	AU 9645064	A1	19960619	AU 1996-45064	19951201
	EP 795011	A1	19970917	EP 1995-943643	19951201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10510166	T2	19981006	JP 1995-519095	19951201
PRAI	US 1994-347718	19941201			
	US 1995-479160	19950607			
	US 1995-482262	19950607			
	WO 1995-US15647	19951201			

AB Drug delivery **conjugates** of a BAL C-tail peptide, including all or a portion of the carboxy terminal region of human bile salt-activated lipase (BAL), **conjugated** to a biol. active substance are described. The C-tail peptide-drug **conjugates**, when orally ingested, compete with native BAL in binding to the intestinal surface,

and, as a result, permit drug compns. to be delivered specifically to the intestine. Useful C-tail peptides are derivs. of the carboxy terminal region of BAL derived from all or portion of the region contg. amino acid residues 539 to 722, and have a mucin-like structure contg. at least three of the repeating proline-rich units of eleven amino acid residues each.

IT **130726-84-0**
RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; bile salt-activated lipase carboxy-terminal **conjugates** for drug delivery to the intestine)

L66 ANSWER 7 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:406101 HCAPLUS
DN 129:78823
TI Releasable nonvolatile mass-label molecules for detection of biomolecules, in particular oligonucleotide-based hybridization and amplification methods, by mass spectrometry
IN Montforte, Joseph A.; Becker, Christopher H.; Pollart, Daniel J.; Shaler, Thomas A.
PA Genetrace Systems Inc., USA; Montforte, Joseph A.; Becker, Christopher H.; Pollart, Daniel J.; Shaler, Thomas A.
SO PCT Int. Appl., 170 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9826095	A1	19980618	WO 1997-US22639	19971210
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9857944	A1	19980703	AU 1998-57944	19971210

PRAI US 1996-33037 19961210
US 1997-46719 19970516
WO 1997-US22639 19971210

AB Using nonvolatile, releasable, mass-labels, the present invention provides for the synthesis and use of mass-labeled compds. to specifically interact with biomol. targets. Following binding of the mass-labeled compds. to the target mol., the unique mass-label can be analyzed using mass spectrometry to identify and characterize the target mol. In one embodiment of the invention, a mass-labeled oligonucleotide probe is used to identify a specific gene sequence. A myriad of mass-labeled compds. may be produced for use in a wide variety of interactions such as oligonucleotide-oligonucleotide hybridization, polynucleotide-polynucleotide interactions, enzyme-substrate or substrate analog/intermediate interactions, polypeptide-nucleic acid interactions, protein-ligand interactions, receptor-ligand interactions, polypeptide-metal interactions, nucleic acid-metal interactions, or antigen-antibody interactions. Also contemplated are combinatorial processes for creating large libraries of compds. permitting rapid screening for a wide variety of targets.

IT **104914-40-1D**, oligonucleotide **conjugate**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(mass label; releasable nonvolatile mass-label mols. for detection of biomols., in particular oligonucleotide-based hybridization and amplification methods, by mass spectrometry)

L66 ANSWER 8 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:300862 HCAPLUS
DN 129:4868
TI Preparation of targetable diagnostic and therapeutic gas-contg. or gas-generating ultrasound contrast agents
IN Klaveness, Jo; Rongved, Pal; Hogset, Anders; Tolleshaug, Helge; Godal, Aslak; et al.
PA Marsden, John Christopher, UK; Nycomed Imaging AS; Klaveness, Jo; Rongved, Pal
SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9818495	A2	19980507	WO 1997-GB2955	19971028
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9747867	A1	19980522	AU 1997-47867	19971028

PRAI GB 1996-22365 19961028
GB 1996-22366 19961028
GB 1996-22367 19961028
GB 1997-699 19970115
GB 1997-8265 19970424
GB 1997-11842 19970606
GB 1997-11845 19970606
US 1997-49264 19970606
US 1997-49265 19970606
US 1997-49267 19970606
WO 1997-GB2955 19971028

AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, comprising a suspension in an aq. carrier liq. of a reporter comprising gas-contg. or gas-generated material, said reporter being **conjugated** to one or more non-proteinaceous, non-peptide and non-**polysaccharide** vectors. Thus, a mixt. of phosphatidylserine, phosphatidylcholine, and biotinamidocaproate-PEG3400-L-Ala-cholesterol (prepn. given) was dispersed in 5% propylene glycol-water, flushed with perfluorobutane, and sonicated to give gas-filled encapsulated microbubbles.

IT **207287-20-5P 207287-21-6P 207287-29-4P**
207287-30-7DP, C-terminal lysine side chain amide with folic acid
207292-79-3P 207292-81-7P 207292-82-8P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of targetable diagnostic and therapeutic gas-contg. or gas-generating ultrasound contrast agents linked to non-bioactive vectors)

L66 ANSWER 9 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:145739 HCAPLUS
DN 128:292317
TI Glycodendrimers as novel biochromatography adsorbents
AU Page, Daniel; Roy, Rene
CS Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SO Int. J. Bio-Chromatogr. (1997), 3(3), 231-244
CODEN: IJOBEQ; ISSN: 1068-0659
PB Harwood Academic Publishers
DT Journal
LA English
AB Synthetic multivalent **glycoconjugates** ending with mannopyranoside residues were evaluated as ligands for the phytohemagglutinins from Con A (Con A) and Pisum sativum using enzyme-linked lectin assays (ELLA) and turbidimetric analyses. The relative affinity of the **neoglycoconjugates**, together with few ref. **monosaccharides**, were detd. by solid-phase inhibition assays using yeast mannan as coating antigen and peroxidase-labeled lectins. The ability of these ligands to selectively ppt. a mannose-binding protein (Con A) from a crude mixt. was also demonstrated using PAGE (SDS-PAGE). These multivalent **glycoconjugates** (glycondendrimers) were shown to constitute novel biochromatog. materials of high affinity for the isolation of **carbohydrate**-binding proteins.
IT **187284-57-7**
RL: ARU (Analytical role, unclassified); BPR (Biological process); NUU (Nonbiological use, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(glycodendrimers as novel biochromatog. adsorbents)

L66 ANSWER 10 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:123976 HCAPLUS
DN 128:213407
TI Programmed cell death and Ich-3 gene manipulation for treatment of septic shock
IN Yuan, Junying; Wang, Suyue; Miura, Masayuki; Fishman, Jay A.
PA Yuan, Junying, USA; Wang, Suyue; Miura, Masayuki; Fishman, Jay A.
SO PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9806263	A1	19980219	WO 1997-US13898	19970808
	W: AU, CA, IL, JP, MX, NO				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9740553	A1	19980306	AU 1997-40553	19970808
	EP 920254	A1	19990609	EP 1997-938160	19970808
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1996-23937		19960809		
	WO 1997-US13898		19970808		

AB This invention relates to modulation of programmed cell death. It also relates to transgenic non-human animals comprising a disrupted Ich-3 gene and methods of making these animals. The Ich-3 mutant animals exhibit resistance to septic shock and defects in folliculogenesis. This invention also relates to methods of using the transgenic animals to

screen for compds. to treat septic shock and defective folliculogenesis. Moreover, this invention also relates to methods of treating septic shock in normal individuals by inhibiting ICH-3.

IT **181055-09-4P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; programmed cell death and Ich-3 gene manipulation for treatment of septic shock)

L66 ANSWER 11 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:89261 HCAPLUS
DN 128:137189
TI Genomic sequence of Rhizobium sp. NGR 234 symbiotic plasmid
IN Rosenthal, Andre; Freiberg, Christoph Bernward; Perret, Xavier Philippe; Broughton, William John
PA Institute of Molecular Biotechnology, Switz.
SO PCT Int. Appl., 230 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9802560	A2	19980122	WO 1997-IB950	19970710
	WO 9802560	A3	19980219		
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 818465	A1	19980114	EP 1996-730001	19960712
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
	EP 917582	A2	19990526	EP 1997-931975	19970710
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI EP 1996-730001 19960712
GB 1997-10395 19970520
WO 1997-IB950 19970710

AB The sequencing and anal. of the complete nucleotide sequence of symbiotic plasmid pNGR234*A isolated from Rhizobium sp. NGR234 is described. The symbiotic replicon is 536,165 bp long; a total of 416 open reading frames were predicted to encode proteins, 139 of which show no similarity to any known proteins. The anal. includes the identification of a no. of novel ORFs and the proteins expressible therefrom which have been ascribed putative functions.

IT **179988-41-1 192078-16-3 192078-63-0**
192079-05-3 192079-93-9 192081-34-8
192081-81-5 192269-56-0
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; genomic sequence of Rhizobium sp. NGR 234 symbiotic plasmid)

L66 ANSWER 12 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:33846 HCAPLUS
DN 128:201505
TI Recombinational exchanges at the capsular **polysaccharide** biosynthetic locus lead to frequent serotype changes among natural isolates of Streptococcus pneumoniae

AU Coffey, Tracey J.; Enright, Mark C.; Daniels, Maggie; Morona, Judy K.; Morona, Renato; Hryniewicz, Waleria; Paton, James C.; Spratt, Brian G.
CS Molecular Microbiology Group, School of Biological Sciences, University of Sussex, Brighton, BN1 9QG, UK
SO Mol. Microbiol. (1998), 27(1), 73-83
CODEN: MOMIEE; ISSN: 0950-382X
PB Blackwell Science Ltd.
DT Journal
LA English
AB Serotype 19F variants of the major Spanish multiresistant serotype 23F clone of Streptococcus pneumoniae have been proposed to have arisen by recombinational exchanges at the capsular biosynthetic locus. Members of the Spanish multiresistant serotype 23F clone and the serotype 19F variants were confirmed to be essentially identical in overall genotype, as they were indistinguishable by REP-PCR, and had identical sequences at three polymorphic housekeeping genes. Eight serotype 19F variants were studied and all had large recombinational replacements at the capsular biosynthetic locus. In all cases, one of the recombinational cross-over points appeared to be upstream of dexB, which flanks one end of the capsular locus, and in six of the variants the other cross-over point was down-stream of aliA, which flanks the other end of the locus. In two strains a recombinational cross-over point between the introduced serotype 19F capsular region and that of the Spanish serotype 23F clone could be clearly identified, within cpsN in one strain and within cpsM in the other. The differences in the recombinational junctions and sequence polymorphisms within the introduced capsular genes, suggested that the eight serotype 19F variants emerged on at least four sep. occasions. Changes in capsular type by recombination may therefore be relatively frequent in pneumococci and this has implications for the long-term efficacy of **conjugate** pneumococcal **vaccines** that will protect against only a limited no. of serotypes.
IT **203810-32-6**
RL: PRP (Properties)
(amino acid sequence; recombinational cross-over point between introduced serotype 19F capsular region and that of Spanish serotype 23F could be clearly identified, within cpsN in one strain and within cpsM in the other)

L66 ANSWER 13 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:809901 HCAPLUS
DN 128:70766
TI Liver retention clearing agents, preparation, and use
IN Theodore, Louis J.; Axworthy, Donald B.; Reno, John M.; Yau, Eric K.; Gustavson, Linda M.; Fritzberg, Alan R.
PA Neorx Corporation, USA
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9746099	A1	19971211	WO 1997-US9400	19970606
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 906015	A1	19990407	EP 1997-926844	19970606
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1996-660603		19960606		

WO 1997-US9400 19970606
OS MARPAT 128:70766
AB Liver retention clearing agents (LRCAs), and the use thereof, are disclosed. LRCAs are composed of a hepatic clearance-directing component, which directs the biodistribution of a LRCA-contg. construct to hepatic clearance; a binding component, which mediates binding of the LRCA to a compd. for which rapid hepatic clearance is desired; a liver-retention component, which diminishes access of binding component-contg. metabolites to target sites; and a structural component to provide a scaffold for the other components. The LRCAs of the invention are useful e.g. in pretargeting protocols in cancer chemotherapy. LRCA prepn. is described.
IT **200640-68-2D**, derivs., homologs **200640-70-6D**, derivs., homologs **200640-72-8D**, derivs., homologs **200640-74-0D**, derivs., homologs
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(liver retention component-binding component; liver retention clearing agents, prepn., and use)

L66 ANSWER 14 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:773399 HCAPLUS
DN 128:87605
TI A strategy for rational design of fully synthetic glycopeptide **conjugate vaccines**
AU Chong, Pele; Chan, Neville; Kandil, Ali; Tripet, Brian; James, Olive; Yang, Yan-Ping; Shi, Shan-Pan; Klein, Michel
CS Research Centre, Pasteur Merieux Canada, North York, ON, M2R 3T4, Can.
SO Infect. Immun. (1997), 65(12), 4918-4925
CODEN: INFIBR; ISSN: 0019-9567
PB American Society for Microbiology
DT Journal
LA English
AB The present study describes a strategy to rationally design fully synthetic glycopeptide **conjugate vaccines**. Glycopeptide immunogens were constructed by coupling synthetic **oligosaccharides** comprising repeating units of synthetic 3-.beta.-D-ribose-(1-1)-D-ribitol-5-phosphate (sPRP) to synthetic peptides contg. potent T-helper cell determinants and B-cell **epitopes** of the Haemophilus influenzae type b (Hib) outer membrane proteins (OMPs) P1, P2, and P6. Rabbit immunogenicity studies revealed that some of these fully synthetic **glycoconjugates** were capable of eliciting high titers of both anti-PRP and anti-OMP IgG antibodies. In addn., we systematically investigated the factors which could influence their immunogenicity. We obsd. that the magnitude of the anti-PRP antibody response markedly depended on the relative spatial orientation of sPRP and T-cell **epitopes**, the anti-PRP antibody response was enhanced when a multiple antigenic peptide was used as a carrier, the anti-PRP antibody response was optimal for three PRP repeating units, and lipidation of peptide-PRP **conjugates** had a minimal effect on the magnitude of the anti-PRP antibody response. The results of this study clearly demonstrate that coupling a **carbohydrate** hapten to a peptide can provide T-cell help and convert it into a T-cell-dependent antigen. The antisera raised against these **conjugates** were also found to be protective against Hib infection in the infant rat model of bacteremia.
IT **200889-46-9DP**, ribose ribitolphosphate **conjugates**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(design of fully synthetic glycopeptide **conjugate**

vaccines)

L66 ANSWER 15 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:506863 HCAPLUS
DN 127:134673
TI Antigen presentation on Class I MHC molecules after introduction into animal cells by stimulation of macropinocytosis and applications in gene therapy and **vaccine** introduction
IN Watts, Colin
PA University Court of the University of Dundee, UK; Watts, Colin
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9723607	A2	19970703	WO 1996-GB3214	19961223
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9717990	A1	19970717	AU 1997-17990	19961223
EP 910632	A2	19990428	EP 1996-945768	19961223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRAI GB 1995-26269 19951221
US 1996-648894 19960516
WO 1996-GB3214 19961223
AB The invention provides a method for the introduction of a substance into living cells via ingestion by macropinocytosis. Macropinocytosis can be stimulated using various agents and the substance to be introduced may be directed to specific cellular targets by being linked with a mol. signal. The invention may be used to introduce **vaccines**. In particular, proteins taken up by macropinocytosis can gain access to the cytosol and therefore into the conventional Class I MHC pathway. IN an example, signal peptide CGGGPKKKRKVED **conjugated** with horse radish peroxidase was taken up via the ruffling/macropinocytosis response and targeted to the cell nucleus. Bone marrow dendritic cells were capable of presenting exogenous antigen on MHC class I mols. and were shown to have high levels of macropinocytosis drive by constitutive membrane ruffling activity.
IT **163815-24-5D**, fusion products, with antigens
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(signal peptide fusion products; antigen presentation on Class I MHC mols. after introduction into animal cells by stimulation of macropinocytosis and applications in gene therapy and **vaccine** introduction)

L66 ANSWER 16 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:442318 HCAPLUS
DN 127:187992
TI Sulfation of Rhizobium sp. NGR234 nod factors is dependent on noeE, a new

host-specificity gene
AU Hanin, M.; Jabbouri, S.; Quesada-Vincens, D.; Freiberg, C.; Perret, X.; Prome, J.-C.; Broughton, W. J.; Fellay, R.
CS LBMPS, Universite de Geneve, Chambesy/Geneve, 1292, Switz.
SO Mol. Microbiol. (1997), 24(6), 1119-1129
CODEN: MOMIEE; ISSN: 0950-382X
PB Blackwell
DT Journal
LA English
AB Rhizobia secrete specific lipo-**chitooligosaccharide** signals (LCOs) called Nod factors that are required for infection and nodulation of legumes. In Rhizobium sp. NGR234, the reducing N-acetyl-D-glucosamine of LCOs is substituted at C6 with 2-O-methyl-L-fucose which can be acetylated or sulfated. A flavonoid-inducible locus on the symbiotic plasmid pNGR234a was identified that contains a new nodulation gene, noeE, which is required for the sulfation of NGR234 Nod factors (NodNGR). NoeE was identified by **conjugation** into the closely related Rhizobium fredii strain USDA257, which produces fucosylated but non-sulfated Nod factors (NodUSDA). R. fredii transconjugants producing sulfated LCOs acquire the capacity to nodulate Calopogonium caeruleum. Mutation of noeE (NGR.DELTA.noeE) abolishes the prodn. of sulfated LCOs and prevents nodulation of Pachyrhizus tuberosus. The sulfotransferase activity linked to NoeE is specific for fucose. In contrast, the sulfotransferase NodH of Rhizobium meliloti seems to be less specific than NoeE, because its introduction into NGR.DELTA.noeE leads to the prodn. of a mixt. of LCOs that are sulfated on C6 of the reducing terminus and sulfated on the 2-O-methylfucose residue. Together, these findings show that noeE is a host-specificity gene which probably encodes a fucose-specific sulfotransferase.
IT **192081-81-5**
RL: PRP (Properties)
(amino acid sequence; sulfation of Rhizobium sp. NGR234 nod factors is dependent on noeE, a new host-specificity gene)

L66 ANSWER 17 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:195623 HCAPLUS
DN 126:190928
TI Pharmaceutical compositions for gene therapy
IN Thatcher, David Robert; Craig, Roger Kingdon; Wilks, Paula Elizabeth; Cunliffe, Vincent Trevor; Welsh, John Hamilton
PA Therexsys Ltd., UK
SO PCT Int. Appl., 192 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9641606	A2	19961227	WO 1996-GB1396	19960610
	WO 9641606	A3	19970522		
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ				
	CA 2224146	AA	19961227	CA 1996-2224146	19960610
	AU 9660114	A1	19970109	AU 1996-60114	19960610
	EP 831922	A2	19980401	EP 1996-917590	19960610
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				

US 5830852 A 19981103 US 1996-769211 19961218
WO 9722363 A2 19970626 WO 1996-GB3137 19961219
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
CA 2241040 AA 19970626 CA 1996-2241040 19961219
AU 9711850 A1 19970714 AU 1997-11850 19961219
AU 705060 B2 19990513
EP 873138 A2 19981028 EP 1996-942490 19961219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI US 1995-124 19950608
GB 1995-13399 19950630
GB 1995-19304 19950921
US 1995-4285 19950925
GB 1995-25955 19951219
US 1995-8952 19951219
US 1996-11531 19960212
US 1996-660231 19960607
WO 1996-GB1396 19960610
WO 1996-GB3137 19961219
OS MARPAT 126:190928
AB The invention is based on the discovery of a synthetic virus-like particle contg. a plurality of peptides capable of condensing nucleic acid and condensed nucleic acid. The plurality of peptides has a low polydispersion index and each peptide of said plurality is a heteropeptide. The nucleic acid may encode sequences of therapeutic benefit. The synthetic virus-like particle is self-assembling and may be designed so as to be capable of targeting a particular cell or tissue type and delivering nucleic acid to be incorporated into the chromosomal or extrachromosomal sequences of the target cells or tissues.
IT **186700-16-3P 186761-24-0P 186844-16-6P 186844-35-9P**
RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(pharmaceutical compns. contg. synthetic virus-like particles for gene therapy)
IT **186762-24-3DP, conjugate** with insulin
186763-17-7DP, conjugate with insulin
186844-28-0DP, conjugate with insulin
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(pharmaceutical compns. contg. synthetic virus-like particles for gene therapy)

L66 ANSWER 18 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:155069 HCAPLUS
DN 126:225470
TI Chemoenzymic Synthesis and Lectin Binding Properties of Dendritic N-Acetyllactosamine
AU Zanini, Diana; Roy, Rene
CS Department of Chemistry, University of Ottawa, Ottawa, ON, K1N 6N5, Can.

SO Bioconjugate Chem. (1997), 8(2), 187-192
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
OS CASREACT 126:225470
AB Proof that multivalency amplifies individual **carbohydrate** -protein interactions is growing. N-Acetylglucosamine (GlcNAc)-based dendrimers with valencies of two (9), four (10), and eight (11) were prepd. in fair to excellent yields (65-99%) on the basis of the rational scaffolding of L-lysine on solid phase using established Fmoc and HOBt chem. These GlcNAc dendrimers were then further transformed enzymically (79-90% yields) into dendritic N-acetyllactosamine (LacNAc) derivs. [di- (12), tetra- (13), and octavalent (14)] using UDP-glucose, UDP-glucose 4'-epimerase, and GlcNAc .beta.-1,4-galactosyltransferase. GlcNAc and LacNAc dendrimers were used to inhibit lectin-porcine stomach mucin interactions. Wheat germ agglutinin and Erythrina cristagalli lectin were used for GlcNAc and LacNAc dendrimers, resp. Di-, tetra-, and octavalent GlcNAc dendrimers exhibited IC50s of 3100, 509, and 88 .mu.M, resp. (6200, 2040, and 703 .mu.M, resp., with respect to monomeric GlcNAc content). IC50s for the LacNAc series were 341, 143, and 86 .mu.M, resp. (682, 574, and 692 .mu.M, resp., as compared with monomeric LacNAc content). These data represent more than 20-fold increases in inhibitory potential for dendritic GlcNAc as compared to that for monomeric GlcNAc. Studies with E. cristagalli do not reveal significant increased inhibitory potential with multivalency.
IT **188039-95-4P**
RL: BPN (Biosynthetic preparation); BPR (Biological process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(chemoenzymic synthesis and lectin binding properties of N-acetylglucosamine- and N-acetyllactosamine-based dendrimers)
IT **188132-41-4P**
RL: BPR (Biological process); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(chemoenzymic synthesis and lectin binding properties of N-acetylglucosamine- and N-acetyllactosamine-based dendrimers)
IT **155679-66-6D**, Wang resin **conjugates**
RL: RCT (Reactant)
(chemoenzymic synthesis and lectin binding properties of N-acetylglucosamine- and N-acetyllactosamine-based dendrimers)
IT **188132-40-3DP**, Wang resin **conjugates**
188132-40-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(chemoenzymic synthesis and lectin binding properties of N-acetylglucosamine- and N-acetyllactosamine-based dendrimers)

L66 ANSWER 19 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:148846 HCAPLUS
DN 126:153664
TI Nucleic acid-transporting system for delivery of nucleic acids into a cell comprising DNA-binding and lytic peptides
IN Smith, Louis C.; Sparrow, James T.; Woo, Savio L. C.
PA Baylor College of Medicine, USA
SO PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9640958	A1	19961219	WO 1996-US5679	19960423
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML				
	CA 2222550	AA	19961219	CA 1996-2222550	19960423
	AU 9657142	A1	19961230	AU 1996-57142	19960423
	AU 705035	B2	19990513		
	EP 832269	A1	19980401	EP 1996-915344	19960423
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 11506722	T2	19990615	JP 1996-500484	19960423
PRAI	US 1995-484777	19950607			
	WO 1996-US5679	19960423			

AB Nucleic acid transporter systems for delivery of nucleic acid to a cell are provided that include (1) a binding mol. which noncovalently binds to the nucleic acid, (2) a lysis agent, and optionally, (3) a binding mol. which is assocd. with a surface or nuclear ligand, thereby resulting in transfection of the recipient cell. The binding mol. is capable of stabilizing and condensing the nucleic acid, and the lysis agent is capable of breaking down an endosomal membrane and freeing the contents into the cytoplasm of the cell. A preferred lysis agent is the JTS-1 lytic peptide (GFEALLELLESLWELLLEA) and a no. of related peptides which were synthesized and characterized for lytic activity. A preferred binding mol. is the peptide K8 with the sequence YKAKKKKKKKKWK or any peptide with the general formula YKAKnWK (where n = 1-40) a variety of which were synthesized and characterized for interaction with DNA and cytotoxicity. DNA/K8/JTS-1 complexes effectively mediate transfection in mammalian cells from a variety of different species and organs. JTS-1 peptides and K8 peptides can be assocd. by covalently linking with 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC) to form a bifunctional condensing/endosomal peptide. Various surface ligands can be coupled to binding mols. such as K8 or to JTS-1 to direct delivery of the nucleic acid to a specific cell. For delivery to hepatocytes, peptides contg. **carbohydrates** for uptake via the asialoglycoprotein receptor were constructed; specific ligands were coupled for delivery to cells with mannose or mannose-6-phosphate receptors; RGD targeting ligands can also be attached to K8 peptides for delivery of therapeutic genes to connective tissue; and lipids can be used for delivery to hepatocytes.

IT **177714-49-7P 186583-03-9P 186583-04-0P**
186583-05-1P 186583-06-2P 186583-07-3P
186583-08-4P 186583-09-5P 186583-11-9P
186583-15-3P 186583-17-5P 186583-19-7P
186583-21-1P 186583-22-2P 186583-23-3P
186583-26-6P 186583-27-7P 186777-05-9P
186777-10-6P 186777-11-7P 186777-18-4P
186777-20-8P
RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(DNA-binding/condensing agent; nucleic acid-transporting system for delivery of nucleic acids into a cell comprising DNA-binding and lytic peptides)

IT **186583-17-5DP**, folate **conjugate 186583-31-3P**
186583-32-4P 186777-09-3P

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(DNA-condensing agent; nucleic acid-transporting system for delivery of nucleic acids into a cell comprising DNA-binding and lytic peptides)

IT **186777-15-1P**
RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(lysis agent; nucleic acid-transporting system for delivery of nucleic acids into a cell comprising DNA-binding and lytic peptides)

IT **186583-35-7P 186583-37-9P 186583-38-0P**
186583-39-1P 186583-40-4P 186583-41-5P
186583-42-6P 186583-43-7P 186583-44-8P
RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleic acid-transporting system for delivery of nucleic acids into a cell comprising DNA-binding and lytic peptides)

L66 ANSWER 20 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1996:446972 HCAPLUS
DN 125:96049
TI Method and compositions containing human bile salt lipase fragment for reducing intestinal absorption of cholesterol
IN Tang, Jordan J. N.; Wang, Chi-Sun
PA Oklahoma Medical Research Foundation, USA
SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9617054	A1	19960606	WO 1995-US15647	19951201
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5696087	A	19971209	US 1994-347718	19941201
	US 5681819	A	19971028	US 1995-479160	19950607
	US 5821226	A	19981013	US 1995-482262	19950607
	AU 9645064	A1	19960619	AU 1996-45064	19951201
	EP 795011	A1	19970917	EP 1995-943643	19951201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10510166	T2	19981006	JP 1995-519095	19951201

PRAI US 1994-347718 19941201
US 1995-479160 19950607
US 1995-482262 19950607
WO 1995-US15647 19951201

AB Compns. derived from all or a portion of the carboxy terminal region of human bile salt-activated lipase (BAL) are described, which, when orally ingested, compete with native BAL in binding to the intestinal surface, thus reducing the physiol. role of BAL in mediating the transfer of cholesterol into the intestinal cells, and, as a result, reducing the amt. of cholesterol absorbed from the intestine into the blood stream. Useful derivs. of the carboxy terminal region of BAL are derived from all or portion of the region contg. amino acid residues 539 to 722, and have a mucin-like structure contg. at least three of the repeating proline-rich units of eleven amino acid residues each. **Conjugates** of the BAL peptide and biol. active substances (such as proteins, vitamins,

chemotherapeutic agents, etc.) are also claimed. The C-terminus of BAL was found to be involved in binding of BAL to intestinal epithelial lining cells. Addn. of the C-terminal fragment to intestinal content released bound endogenous BAL. This fragment competitively inhibited cholesterol uptake in the rat intestine. BAL was shown to mediate uptake of triglycerides but not taurocholate in isolated rat intestinal tissue.

IT **130726-84-0D**, catalytically inactive analogs of
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; method and compns. contg. human bile salt lipase fragment for reducing intestinal absorption of cholesterol)

L66 ANSWER 21 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1996:435051 HCAPLUS
DN 125:96035
TI Increasing the immunogenicity of an antigen or hapten by **conjugating** with serum albumin binding proteins
IN Binz, Hans; Nguyen, Ngoc Thien; Andreoni, Christine; Nygren, Per Ake; Stahl, Stefan; Uhlen, Mathias
PA Pierre Fabre Medicament, Fr.
SO PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614416	A1	19960517	WO 1995-FR1466	19951107
	W: AU, CA, JP, NZ, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2726471	A1	19960510	FR 1994-13310	19941107
	FR 2726471	B1	19970131		
	CA 2204619	AA	19960517	CA 1995-2204619	19951107
	ZA 9509419	A	19960528	ZA 1995-9419	19951107
	AU 9641202	A1	19960531	AU 1996-41202	19951107
	EP 791064	A1	19970827	EP 1995-939338	19951107
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10509311	T2	19980914	JP 1995-515110	19951107

PRAI FR 1994-13310 19941107
WO 1995-FR1466 19951107

AB A method for increasing the immunogenicity of an immunogen, antigen or hapten, regardless of the delivery method, by **conjugating** the mol. a carrier mol. that is a polypeptide capable of specifically binding to mammalian serum albumin. The method is specifically directed to the use of Streptococcal protein G as the albumin-binding protein and the G glycoprotein of respiratory syncytial virus as the antigen. These proteins may be manufd. as fusion proteins in a bacterial host. Fusion proteins of protein G and the G glycoprotein of human respiratory syncytial virus were manufd. by expression of the cloned gene in Escherichia coli. Mice inoculated with the fusion protein showed an antibody titer to the G glycoprotein of 92,800 at 21 days after the first inoculation, the G protein peptide alone had a titer of 180 and a mixt. of the two proteins had a titer of 1,200. Effective protection of mice against RSV was demonstrated.

IT **172019-51-1D**, fusion products with serum albumin-binding proteins
172307-35-6D, fusion products with serum albumin-binding proteins
172307-36-7D, fusion products with serum albumin-binding proteins
172307-37-8D, fusion products with serum albumin-binding proteins
172450-74-7D, fusion products with serum albumin-binding proteins

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; increasing immunogenicity of antigen or hapten by **conjugating** with serum albumin binding proteins)

L66 ANSWER 22 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:605782 HCAPLUS
DN 123:54133
TI Annular antigen scaffolds comprising thioether linkages
IN Cunningham, Barry; Hannah, John; Tolman, Richard L.
PA Merck and Co., Inc., USA
SO Brit. UK Pat. Appl., 51 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2282813	A1	19950419	GB 1994-20263	19941007
PRAI US 1993-138514	19931015			

OS MARPAT 123:54133
AB Scaffolds of antigens are prepd. by a convergent synthesis and coupling of sol. precursors comprising solubilizing groups. Cyclic peptide **epitopes**, known to be more effective immunogen than linear antigens because they are constrained to fewer conformations, are incorporated. In addn. to the **epitopes**, linear T-haptens may be incorporated at either the C- or the N-terminus of the scaffold construct. The scaffolds constitute effective synthetic **vaccines**. The scaffolds are cyclized via a thioether linkage, the ring of which comprises from 3 to 10 lysine radicals, to which the **epitope** or antigen is bonded. The **epitope** or antigen is preferably and HIV gp120 V3 loop peptide (HIV PND), a malarial peptide, a gonadotropin releasing hormone (GnRH) peptide or bacterial capsular **polysaccharide**. In example, an annular antigen scaffold core was prepd., **conjugated** with HIV PND and used for detn. of anti-HIV IgG antibody in sera and antibody induction for neutralizing HIV infectivity, or **conjugated** with GnRH peptides and used as immunogen and tested for its binding specificity to pituitary GnHR receptor.
IT **163725-25-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(annular antigen scaffolds comprising thioether linkages)
IT **163912-73-0P 163912-77-4P 163912-85-4P**
163912-90-1P 164781-94-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(annular antigen scaffolds comprising thioether linkages)
IT **163725-24-4P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antigen-coupled; annular antigen scaffolds comprising thioether linkages)

L66 ANSWER 23 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:358900 HCAPLUS
DN 122:127703
TI Technetium-99m-labeled peptides for imaging inflammation
IN Dean, Richard T.; Moyer, Brian R.
PA Diatech, Inc., USA

SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 21

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9428942	A1	19941222	WO 1994-US5895	19940525
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5561220	A	19961001	US 1993-73577	19930607
AU 9470453	A1	19950103	AU 1994-70453	19940525
AU 684294	B2	19971211		
EP 702570	A1	19960327	EP 1994-919239	19940525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
JP 08509001	T2	19960924	JP 1994-501848	19940525

PRAI US 1993-73577 19930607
US 1991-653012 19910208
US 1993-19864 19930219
WO 1994-US5895 19940525
OS MARPAT 122:127703
AB Radiolabeled scintigraphic imaging agents capable of accumulating at inflammatory sites in vivo comprise (1) a polybasic compd. (having .gtoreq.5 chem. functionalities that are basic at physiol. pH) covalently linked to a 99mTc-binding moiety and (2) a polysulfated glycan. The polybasic compd. is preferably platelet factor 4 or a fragment or analog thereof. Methods and kits for making such compns., and methods for using such compns. to image sites of infection and inflammation in a mammalian body, are provided. Thus, 99mTc-labeled Ac-KKKKKCAcmGCAcmGGPLYKKIIKKLLES (Acm = acetamidomethyl), wherein CAcmGCAcm constitutes the radiolabel-binding moiety, was injected i.v. into humans for successful diagnosis of deep thigh abscess, appendicitis, peritonitis, and splenic bed abscess by imaging with a .gamma. camera.
IT **152175-14-9 158615-58-8 158615-59-9**
158615-62-4 158615-63-5 158615-64-6
158615-65-7
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(technetium-99m-labeled peptides for imaging inflammation)

L66 ANSWER 24 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:248787 HCAPLUS
DN 122:114921
TI Nucleic acid transfer peptides and their use for transfecting eukaryotic cells with nucleic acids
IN Surovoy, Andrej; Dannull, Jens; Moelling, Karin; Jung, Guenther-Gerhard
PA Boehringer Mannheim GmbH, Germany
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9423751	A1	19941027	WO 1994-EP1147	19940413
W: AU, CA, FI, HU, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9465685	A1	19941108	AU 1994-65685	19940413
DE 4412629	A1	19950126	DE 1994-4412629	19940413
EP 693939	A1	19960131	EP 1994-913594	19940413

R: AT, BE, CH, DE, FR, GB, IT, LI
PRAI DE 1993-4312131 19930414
DE 1993-4318470 19930603
WO 1994-EP1147 19940413
AB A nucleic acid transfer peptide contains: (a) a 1st ligand comprising a peptide, steroid, **carbohydrate**, lipid, or vitamin which binds to a binding partner at the surface of eukaryotic cells, triggering endocytosis of the complex composed of the nucleic acid transfer peptide and a nucleic acid; (b) a 2nd ligand comprising a peptide, steroid, **carbohydrate**, lipid, or vitamin which binds to a binding partner on the outer membrane of the nucleus of eukaryotic cells; (c) a 3rd ligand which is a basic peptide and binds to nucleic acids by ion exchange. These peptides are useful for injecting nucleic acids into eukaryotic cells. Thus, the proliferation of Capan-1 human adenocarcinoma cells was inhibited by transformation with a mutant Ki-Ras ribozyme complexed with peptide AcRGD-1-35 (sequence given).
IT **160046-83-3P 160046-94-6P 160047-02-9P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleic acid transfer peptides for transfecting eukaryotic cells with nucleic acids)
IT **159857-06-4P 160046-71-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(nucleic acid transfer peptides for transfecting eukaryotic cells with nucleic acids)

L66 ANSWER 25 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:16651 HCAPLUS
DN 122:103927
TI **Conjugate** of **polysaccharides** and peptides for **vaccines** against group B Streptococcus
IN Michel, James L.; Kasper, Dennis L.; Ausubel, Frederick M.; Madoff, Lawrence C.
PA General Hospital Corp., USA; Brigham and Women's Hospital
SO PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9410317	A2	19940511	WO 1993-US10506	19931102
	WO 9410317	A3	19940707		
	W: AU, CA, FI, HU, JP, KR, NO, NZ, PL, RU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2146926	AA	19940511	CA 1993-2146926	19931102
	AU 9456654	A1	19940524	AU 1994-56654	19931102
	AU 689452	B2	19980402		
	ZA 9308171	A	19950307	ZA 1993-8171	19931102
	EP 669985	A1	19950906	EP 1994-902202	19931102
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	HU 70981	A2	19951128	HU 1995-1260	19931102
	JP 08505282	T2	19960611	JP 1993-511389	19931102
	US 5648241	A	19970715	US 1994-363311	19941222
	FI 9501979	A	19950629	FI 1995-1979	19950426
	NO 9501629	A	19950703	NO 1995-1629	19950428
	US 5820860	A	19981013	US 1995-463288	19950605
	US 5847081	A	19981208	US 1995-462679	19950605

	US 5843444	A	19981201	US 1995-470445	19950606
	US 5858362	A	19990112	US 1995-466210	19950606
	US 5908629	A	19990601	US 1995-467147	19950606
	AU 9856269	A1	19980507	AU 1998-56269	19980223
PRAI	US 1992-968866	19921102			
	US 1989-408036	19890915			
	WO 1993-US10506	19931102			
	US 1994-363311	19941222			

AB A **vaccine** capable of protecting a recipient from infection caused by group B Streptococcus contains a group B Streptococcus **polysaccharide** antigen **conjugated** with a peptide from the .alpha. antigen subgroup of C proteins. The **vaccine** may contain one or more such **conjugates**. Partially purified C proteins of group B Streptococcus were used to raise antibodies for screening of partial digest gene banks from a group B Streptococcus in pUX12. A series of clones were obtained and the C protein genes they carried were characterized.

IT **149025-02-5**, Antigen .alpha. (Streptococcus agalactiae clone pJMS23 gene bca precursor) **157091-78-6**, C Protein .alpha. antigen (Streptococcus agalactiae clone pJMS23 bca gene) **157091-86-6**, C Protein .alpha. antigen with internal repeat (Streptococcus agalactiae bca gene) **157091-87-7**, C Protein .alpha. antigen with 3 internal repeats (Streptococcus agalactiae bca gene) **157091-88-8**, C Protein .alpha. antigen with 4 internal repeats (Streptococcus agalactiae bca gene) **157091-89-9**, C Protein .alpha. antigen with 5 internal repeats (Streptococcus agalactiae bca gene) **157091-90-2**, C Protein .alpha. antigen with 6 internal repeats (Streptococcus agalactiae bca gene) **157091-91-3**, C Protein .alpha. antigen with 7 internal repeats (Streptococcus agalactiae bca gene) **157091-93-5**, C Protein .alpha. antigen with 2 internal repeats (Streptococcus agalactiae bca gene)
RL: BIOL (Biological study)
(amino acid sequence of and cloning and expression in Escherichia coli of gene for, prepn. of **conjugate vaccines** against Group B Streptococcus in relation to)

L66 ANSWER 26 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1994:264827 HCAPLUS
DN 120:264827
TI Metal chelating peptide
IN Gariepy, Jean
PA Ontario Cancer Institute, Can.
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9323425	A1	19931125	WO 1993-CA207	19930507
	W: JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2094785	AA	19931109	CA 1993-2094785	19930423
PRAI	US 1992-880691	19920508			

AB A branched peptide carrying a no. of chelating groups (metal chelating peptide (MCP)) has a C-terminus that may be structured to provide a variety of means for unidirectional coupling to a targeting agent such as an antibody. The no. of metal chelating sites may be quite large (in excess of 16). The MCP can be used to deliver a concd. radionuclide mass

to a target cell by coupling the MCP to a targeting agent. A branched peptide with a C-terminal .beta.-alanine was synthesized by t-Boc chem. with branches introduced by coupling to .epsilon.-amino groups of lysine and EDTA moieties added as the t-Bu protected deriv. Methods for coupling the protein to antibodies via the **carbohydrate** moiety using a maleimide are discussed.

IT **154531-07-4**
RL: BIOL (Biological study)
(as metal chelating peptide for targetted delivery of metal radionuclides)

IT **154531-08-5D**, derivs. with coupling reagents
RL: BIOL (Biological study)
(as metal chelating peptide for targetted delivery of metal radionuclides, **conjugation** with targetting moieties)

IT **154531-08-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as metal chelating peptide for targetted delivery of metal radionuclides)

L66 ANSWER 27 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1994:72410 HCAPLUS
DN 120:72410
TI Trans-sialidase of Trypanosoma, its preparation and use
IN Nussenzweig, Victor; Schenkman, Sergio; Eichinger, Dan; Vandekerckhove, Flip
PA New York University, USA
SO PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9318787	A1	19930930	WO 1993-US2869	19930325
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9339375	A1	19931021	AU 1993-39375	19930325
	EP 586687	A1	19940316	EP 1993-908615	19930325
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI	US 1992-857519	19920325			
	US 1992-973851	19921110			
	WO 1993-US2869	19930325			

AB Trans-sialidase (I) of Trypanosoma trypomastigotes is isolated and purified or prepd. by recombinant DNA technol. for use in **vaccination** against Trypanosoma infections, prepn. of antibodies for detection of I, synthesis of sialyl .alpha.(2.fwdarw.3)-linked **saccharides** and glycoproteins and glycolipids contg. them, etc. I catalyzes transglycosylation with sialic acid donated by free **saccharides** or **glycoconjugates** other than sugar nucleotides. I may be used to sialylate drugs, proteins, **polysaccharides**, lipids, etc. to increase their biol. half-life. Thus, monoclonal antibodies to Ssp-3 **epitopes** of T. cruzi failed to recognize live T. cruzi trypomastigotes desialylated with bacterial neuraminidase; recognition was restored by incubation of the trypomastigotes with .alpha.(2.fwdarw.3)-sialyllactose or fetuin. The I responsible was purified, characterized, and shown to be similar to T. cruzi neuraminidase in enzymic activity, chromatog. behavior, and SDS-PAGE, but <100% homologous to it in amino acid sequence.

IT **152413-95-1 152413-99-5**

SO Neth. Appl., 45 pp.
CODEN: NAXXAN
DT Patent
LA Dutch
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI NL 9101359	A	19930301	NL 1991-1359	19910807

AB The title **conjugate**, comprising the B-cell-activating core region **saccharide** portion of a gram-neg. bacterial **lipopolysaccharide** coupled to the T-helper cell-activating **epitope** (or a peptide derived therefrom) of a protein from the same bacterium (e.g. meningococcus), is useful as a **vaccine** against the bacterium. The 2 moieties are joined through a spacer with retention of the free NH2 groups of the phosphoethanolamine residues on the **saccharide**. Thus, a spacer-modified protected fragment of the inner core region of **lipopolysaccharide** immunotype 6 of Neisseria meningitidis with structure (prepn. given) was condensed with a deriv. of peptide sequence 47-59 of strain H44/76 class 1 outer membrane protein of N. meningitidis with structure BrCH2CO-GGTKISDFGSFIGFK-NH2 (prepn. given) and subjected to ammonolysis to provide an antigen of the above type.
IT **148779-04-8**
RL: PROC (Process)
(presentation of, to peptide-specific T-cell clone by Epstein-Barr virus-transformed B-cells)

L66 ANSWER 30 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1993:470376 HCAPLUS
DN 119:70376
TI Leukocyte adhesion molecule-1 (LAM-1) and ligand thereof and diagnostic and therapeutic uses thereof
IN Tedder, Thomas F.; Spertini, Olivier G.
PA Dana-Farber Cancer Institute, Inc., USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 8

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9306835	A1	19930415	WO 1992-US8467	19921005
W: AU, CA, JP				
AU 9227737	A1	19930503	AU 1992-27737	19921005
PRAI US 1991-770608		19911003		
WO 1992-US8467		19921005		

AB LAM-1, a leukocyte-assocd. cell surface protein, is characterized; it contains domains homologous with binding domains of animal lectins, growth factors, and C3/C4 binding proteins. CDNA and genomic sequences are presented. Also disclosed are methods and agents for detecting, identifying, and characterizing the LAM-1 ligand. The LAM-1 protein, a ligand-binding fragment thereof, or an antagonist to the LAM-1 protein or ligand-binding fragment are used in methods of detecting sites of inflammation or disease in a human patient. They are also used in therapeutic compns. in methods of treating a patient suffering from a leukocyte-mobilizing condition. CDNA encoding LAM-1 was isolated from a human tonsil cDNA library and identified and characterized.
IT **147206-94-8**, L-selectin (human clone pLAM-1 leukocyte adhesion molecule reduced)

RL: BIOL (Biological study)
(amino acid sequence of and characterization of and diagnostic and therapeutic uses of)

L66 ANSWER 31 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:509979 HCAPLUS
DN 117:109979
TI Cloning of Neisseria meningitidis protein P64k gene and **vaccines** containing the protein
IN Silva Rodriguez, Ricardo; Selman Houssein Sosa, Manuel; Guillen Nieto, Gerardo; Herrera Martinez, Luis Saturnino; Fernandez Mas, Julio Raul; Novoa Perez, Lidia Ines; Morales Grillo, Juan; Morera Cordova, Vivian; Gonzalez Blanco, Sonia; et al.
PA Centro de Ingenieria Genetica y Biotecnologia, Cuba
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 474313	A2	19920311	EP 1991-202291	19910906
	EP 474313	A3	19930224		
	EP 474313	B1	19970423		
	FI 9104129	A	19920308	FI 1991-4129	19910903
	IN 173030	A	19940129	IN 1991-MA662	19910904
	CA 2050749	AA	19920308	CA 1991-2050749	19910905
	AU 9183683	A1	19920312	AU 1991-83683	19910905
	AU 657487	B2	19950316		
	US 5286484	A	19940215	US 1991-754918	19910905
	AT 152175	E	19970515	AT 1991-202291	19910906
	ES 2103295	T3	19970916	ES 1991-202291	19910906
	JP 06169779	A2	19940621	JP 1991-255872	19910907
PRAI	CU 1990-145		19900907		

AB The N. meningitidis P64k protein gene is cloned. The gene was cloned and expressed in Escherichia coli. It was produced to the extent of >25% of the total cellular protein. Monoclonal antibodies to this protein had significant bactericidal titers against other N. meningitidis serogroups, serotypes, and subtypes. Other **vaccines** were prepd., i.e. a protein contg. the variable **epitopes** of the N. meningitidis P1.15 protein fused to P64k, an Haemophilus influenzae **polysaccharide**-P64k **conjugate**, and a bivalent **vaccine** contg. hepatitis B surface antigen and P64k. Segments of P64k had significant sequence similarity to E. coli acetyltransferase and lipoamide dehydrogenase.
IT **143011-14-7**, Antigen P 64k (Neisseria meningitidis clone pM-3 reduced)
RL: PRP (Properties)
(amino acid sequence of, complete, and cloning and expression in Escherichia coli of gene for)

L66 ANSWER 32 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:192083 HCAPLUS
DN 116:192083
TI Mononuclear leukocyte-directed endothelial adhesion molecule associated with atherosclerosis
IN Gimbrone, Michael A., Jr.; Cybulsky, Myron I.; Collins, Tucker
PA Brigham and Women's Hospital, USA
SO PCT Int. Appl., 86 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9113085	A1	19910905	WO 1991-US1400	19910228
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9175818	A1	19910918	AU 1991-75818	19910228
	AU 642731	B2	19931028		
	CA 2077345	AA	19910927	CA 1991-2077345	19910228
	EP 517854	A1	19921216	EP 1991-906839	19910228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05506856	T2	19931007	JP 1991-507155	19910228
	US 5708147	A	19980113	US 1994-261304	19940616
PRAI	US 1990-487038	19900302			
	US 1991-649565	19910201			
	WO 1991-US1400	19910228			

AB A protein comprising a mononuclear leukocyte-selective endothelial-leukocyte adhesion mol. expressed in atherosclerotic lesions (ATHERO-ELAM) is purified. The mol. wt. and amino acid sequence of the ATHERO-ELAM protein are detd. Monoclonal antibody (MAb) capable of binding to the ATHERO-ELAM protein is prepd. The MAb can be used in immunoassay of the ATHERO-ELAM in samples for diagnosis of early atherosclerotic lesions. The MAb or its **conjugates** with a drug (e.g. antiproliferative, anti-inflammatory, etc.) can be administered to a patient to block monocyte adhesion sites of endothelial cells expressing ATHERO-ELAM. The nucleotide sequence of DNA encoding ATHERO-ELAM is also detd., which can be used in genetic engineering for prepg. the ATHERO-ELAM. Procedures for isolation and culture of endothelium as immunogen, prodn. of MAb specific to ATHERO-ELAM, immunoassay of ATHERO-ELAM with the MAb, prodn. of sol. ATHERO-ELAM by mol. genetic engineering, and other relevant expts. are provided.

IT **139568-64-2P**, Glycoprotein ELAM (rabbit isoform protein moiety reduced)
RL: PREP (Preparation)
(atherosclerotic lesions assocd. with and mol. cloning in prodn. of)

L66 ANSWER 33 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:126811 HCAPLUS
DN 116:126811
TI HIV envelope polypeptides
IN Gregory, Timothy J.; Leonard, Cordelia K.; Spellman, Michael W.
PA Genentech, Inc., USA
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9115512	A2	19911017	WO 1991-US2166	19910401
	WO 9115512	A3	19911212		
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2078545	AA	19911004	CA 1991-2078545	19910401
	AU 9176768	A1	19911030	AU 1991-76768	19910401
	EP 527789	A1	19930224	EP 1991-908106	19910401

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
JP 05506221 T2 19930916 JP 1991-507619 19910401
PRAI US 1990-504772 19900403
WO 1991-US2166 19910401
AB Polypeptides, esp. cyclized peptides, of HIV env glycoprotein, are provided as well as antibodies directed against the polypeptides. The antibodies and peptides are useful for prophylaxis or treatment of HIV infection. Antibody **conjugates** with cytotoxin, detectable marker, or water-insol. matrix are also disclosed. The disulfide bond linkages and glycosylation sites and **oligosaccharide** type were detd. for glycoprotein gp120 by studying 2 recombinant proteins (rgp120, as fusion proteins with the signal peptide of herpes simplex glycoprotein gD1).
IT **139497-81-7**, Glycoprotein gp 120 (human immunodeficiency provirus 2 gene env protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of, disulfide bonding in relation to)
IT **139497-80-6**, Glycoprotein gp 120 (human immunodeficiency provirus 2 gene env protein moiety)
RL: PRP (Properties)
(disulfide bonding pattern and potential **oligosaccharide** sites of)

L66 ANSWER 34 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1991:651669 HCAPLUS
DN 115:251669
TI A method for the stepwise, controlled synthesis of chemical species, particularly peptides, on protein substrates, coupled products obtained by the method, and the use of these coupled products, e.g. as **vaccines**
IN Houen, Gunnar; Holm, Arne
PA Den.
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9108220	A1	19910613	WO 1990-DK311	19901130
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, GR, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9168929	A1	19910626	AU 1991-68929	19901130

PRAI DK 1989-6085 19891201
WO 1990-DK311 19901130
AB Chem. species, esp. peptides, are synthesizied by a stepwise, controlled process using a proteinaceous substances as the synthesis substrate. The coupled products obtained by the process can be used, e.g., as **vaccines**, matrix materials, or carrier mols. The products, including peptides and peptide derivs., prepd. by the method are also claimed. Bovine serum albumin (BSA) was placed in a silylated reaction vessel and the CO2H groups were diethylamidated before coupling glutamic acid as the Fmoc (9-fluorenylmethyloxycarbonyl) and tert-Bu protected Dhbt (3-hydroxy-3,4-dihydrobenzotriazin-4-one ester, blocking remaining amino groups with acetic anhydride, and sequentially coupling Fmoc- and side chain-protected Dhbt esters of lysine, serine, threonine, aspartic acid, methionine, and serine. Piperidine was used to remove the Fmoc protecting

group between couplings. Side chain protection groups were removed in CH2Cl2/F3CCO2H (1:1 vol./vol.) at 0.degree.. The product had an av. of 35 synthesized peptide chains per BSA mol. The coupled product was used to raise antibodies to Ser-Met-Asp-Thr-Ser-Lys-Glu in rabbits.

IT **137235-69-9D, conjugates** with protein carrier
RL: RCT (Reactant)
(stepwise synthesis of, for **vaccines** and other uses)

L66 ANSWER 35 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1991:400778 HCAPLUS
DN 115:778
TI Covalently-linked complexes and methods for enhanced cytotoxicity and imaging
IN Anderson, David C.; Morgan, A. Charles; Abrams, Paul G.; Nichols, Everett J.; Fritzberg, Alan R.
PA NeoRx Corp., USA
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 359347	A2	19900321	EP 1989-250014	19890814
	EP 359347	A3	19900418		
	EP 359347	B1	19921223		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 5135736	A	19920804	US 1988-232337	19880815
	US 5169933	A	19921208	US 1989-390241	19890807
	CA 1334513	A1	19950221	CA 1989-608198	19890811
	JP 02124833	A2	19900514	JP 1989-209992	19890814
	AT 83669	E	19930115	AT 1989-250014	19890814
PRAI	US 1988-232337	19880815			
	EP 1989-250014	19890814			

AB Covalently-linked complexes (CLCs) for targeting a defined population of cells comprise a targeting protein (e.g. antibody, hormone, enzyme, etc.), a cytotoxic agent (e.g. radionuclide, toxin, drug, etc.) an enhancing moiety capable of enhancing CLC-target cell interaction (e.g. a translocating/internalizing moiety, an anchoring peptide, membrane-sol. hydrophobic mol., etc.). The CLCs are used to enhance in vivo cytotoxicity and imaging (no data). Translocating peptide, Cys-Gly-Glu-Ala-Ala-Leu-Ala(Glu-Ala-Leu-Ala)4-Glu-Ala-Leu-Glu-Ala-Leu-Ala-Ala-NH2, is **conjugated** via succinimidyl 4(N-maleimidemethyl)cyclohexane-1-carboxylate (SMCC) to reduced toxin A chain. The **conjugate** is reacted with iminothiolane to generate further thiol groups which are then bonded to reduced antibody to prep. translocating peptide-ricin A chain-antibody CLC.

IT **131256-82-1D, conjugates** with cytotoxic agent and targeting protein
RL: BIOL (Biological study)
(cell targeting with, for enhanced cytotoxicity and imaging)

L66 ANSWER 36 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1990:96832 HCAPLUS
DN 112:96832
TI Transplantation antigen analog or binding peptides in immunomodulating compositions and their use
IN Gefter, Malcolm L.; Guillet, Jean Gerard
PA Massachusetts Institute of Technology, USA

SO PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8800057	A1	19880114	WO 1987-US1532	19870626
	W: AU, DK, JP, KR, NO				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8777524	A1	19880129	AU 1987-77524	19870626
	AU 603131	B2	19901108		
	EP 271577	A1	19880622	EP 1987-905022	19870626
	EP 271577	B1	19951004		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 01500595	T2	19890301	JP 1987-504476	19870626
	JP 2633881	B2	19970723		
	AT 128627	E	19951015	AT 1987-905022	19870626
	CA 1301064	A1	19920519	CA 1987-541064	19870630
	IL 83039	A1	19940412	IL 1987-83039	19870630
	NO 8800860	A	19880226	NO 1988-860	19880226
	DK 8801018	A	19880426	DK 1988-1018	19880226
	US 5019384	A	19910528	US 1989-434548	19891113
	JP 09176042	A2	19970708	JP 1996-273737	19961016
	JP 2828960	B2	19981125		

PRAI US 1986-880134 19860630
US 1986-924286 19861029
US 1987-17343 19870220
US 1987-66812 19870625
JP 1987-504476 19870626
WO 1987-US1532 19870626

AB Methods and compns. are provided comprising oligopeptides having defined contiguous and/or noncontiguous amino acid sequences for enhanced affinity of immunogens restricted by one or more transplantation antigens. Oligopeptides are prepd. which can be used to modulate an immune response when a lymphocytic system is contacted with one or more antigens. The compns. employed may have a single or mixt. of oligopeptides, so that a single compn. may be used with one or more cellular systems having a plurality of haplotypes. A method for defining the enhanced affinity amino acid sequence is also provided. Mice were immunized with (NANP)3-peptide P12-26 (.lambda. repressor amino acid residues 12-26) **conjugate** (I), (NANP)50, (NANP)-peptide P12-26 **conjugate**, or (NANP)2-peptide P12-26 **conjugate**. Sera from mice immunized with I (10 days after secondary boost) bound directly to circumsporozoite falciparum as detd. by conventional radiolabeled anti-mouse globulin RIA. Lymph node derived T-cell proliferation was obsd. in mice 8 days after immunization with I. T-cell proliferation was seen with peptide P12-26 and the peptide **conjugates** while none was seen with (NANP)3 or (NANP)50. The presence of the the Class II mol. binding sequences (peptide P12-26) on the immunogen imparted T-cell stimulatory activity to (NAMP)3 (Plasmodium falciparum target sequence) which on its own is inactive in these mice.

IT **120871-31-0 120871-32-1 120871-34-3**
RL: BIOL (Biological study)
(immune response to)

IT **120871-33-2**
RL: BIOL (Biological study)
(malaria **vaccine** contg.)

IT **112805-25-1**

RL: BIOL (Biological study)
(of .lambda. repressor, as transplantation antigen analog)
IT **108273-65-0 120871-30-9**
RL: BIOL (Biological study)
(of .lambda. repressor, as transplantation antigen analog, immune response to)

L66 ANSWER 37 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1989:5136 HCAPLUS
DN 110:5136
TI Nuclear protein import: specificity for transport across the nuclear pore
AU Wolff, Barbara; Willingham, Mark C.; Hanover, John A.
CS NIDDK, Bethesda, MD, 20892, USA
SO Exp. Cell Res. (1988), 178(2), 318-34
CODEN: ECREAL; ISSN: 0014-4827
DT Journal
LA English
AB Following microinjection into fused cultured cells, nuclear protein import was directly monitored by fluorescence microscopy using B-phycoerythrin (PE; Mr 240,000) coupled to synthetic peptides corresponding to the simian virus 40 (SV-40) large T antigen nuclear localization signal. Peptides with a single amino acid replacement found in a cytoplasmic mutant of T antigen (cT) failed to promote uptake. Further studies with deletion peptides revealed the min. sequence requirements for efficient nuclear import of PE **conjugates** to be similar to those previously defined genetically for large T angtigen itself. No competitive inhibition of uptake was obsd. in cells expressing nuclear or cytoplasmic T antigen. Nuclear import was time- and temp.-dependent. Wheat germ agglutinin (WGA) binds to glycoproteins bearing O-linked N-acetylglucosamine on the cytoplasmic face of the nuclear pore in vitro (Hanover, J.A., et al., 1987) and in vivo. Microinjection of WGA into the cytoplasm of living cells did not alter the diffusion of dextran (Mr 10,000) into the nucleus, but blocked the uptake of PE **conjugates** . This inhibition was reversed when a competing **saccharide** was introduced into the cytoplasm. Evidently, sequence-specific nuclear import occurs in living cells.
IT **104914-40-1 117972-29-9 117972-31-3**
RL: BIOL (Biological study)
(protein transport across nuclear pore of animal cells promotion by, structure in relation to)

L66 ANSWER 38 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1988:34506 HCAPLUS
DN 108:34506
TI Membrane anchor **conjugates** with active agents, their preparation and uses
PA Hoechst A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 34 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3546150	A1	19870122	DE 1985-3546150	19851227
	FI 8602631	A	19861225	FI 1986-2631	19860619
	FI 94419	B	19950531		
	FI 94419	C	19950911		
	EP 210412	A2	19870204	EP 1986-108324	19860619

	EP 210412	A3	19900207		
	EP 210412	B1	19951213		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 131491	E	19951215	AT 1986-108324	19860619
	DK 8602940	A	19861225	DK 1986-2940	19860623
	DK 172399	B1	19980518		
	NO 8602511	A	19861229	NO 1986-2511	19860623
	NO 174207	B	19931220		
	NO 174207	C	19940330		
	AU 8658943	A1	19870108	AU 1986-58943	19860623
	AU 611385	B2	19910613		
	ZA 8604657	A	19870225	ZA 1986-4657	19860623
	JP 62063600	A2	19870320	JP 1986-145031	19860623
	ES 556417	A1	19880216	ES 1986-556417	19860623
	SU 1823876	A3	19930623	SU 1986-4027766	19860623
	NO 9200356	A	19861229	NO 1992-356	19920127
PRAI	DE 1985-3522512	19850624			
	DE 1985-3546150	19851227			
	NO 1986-2511	19860623			

AB Active agents (antigens, antibiotics, hormones, enzymes, labels, etc.) are **conjugated** to compds. which can be inserted into cell membranes. The **conjugates** are useful e.g. to promote cell fusion, to provide cells with fluorescent or spin labels, etc. The extracytoplasmic region of the EGF receptor encompassing residues 516-529 was constructed by the Merrifield resin method, coupled to fluorenylmethoxycarbonyl(tert-butyl)serine and S-[2,3-bis(palmitoyloxy)propyl]-N-palmitoylcysteinylserine(Pam3Cys-Ser) (the N-terminus of the outer membrane lipoprotein of Escherichia coli) as adjuvant, cleaved from the resin, and administered once i.p. to mice. A high titer of antibodies to the EGF receptor peptide was detected within 2 wk.

IT **112208-01-2P 112208-02-3DP**, reaction products with FITC
112208-04-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as membrane anchor for biol. active agents)

L66 ANSWER 39 OF 40 HCAPLUS COPYRIGHT 1999 ACS
AN 1987:401665 HCAPLUS
DN 107:1665
TI Isolation from Klebsiella and characterization of two rcs genes that activate colanic acid capsular biosynthesis in Escherichia coli
AU Allen, Philippa; Hart, C. A.; Saunders, J. R.
CS Dep. Microbiol. Med. Microbiol., Univ. Liverpool, Liverpool, L69 3BX, UK
SO J. Gen. Microbiol. (1987), 133(2), 331-40
CODEN: JGMIAN; ISSN: 0022-1287
DT Journal
LA English
AB Two genes, designated rcsA (regulation of capsule synthesis) and rcsB, that had been cloned from the chromosome of K. aerogenes, (K. pneumoniae) capsular serotype K21 were capable of activating expression of colanic acid capsular **polysaccharide** in E. coli K12. The Klebsiella rcsA gene encoded a polypeptide of 23 kDa that was required for the induction of a mucoid phenotype at .ltoreq.30.degree. but not at .gtoreq.37.degree.. The Klebsiella rcsB locus encoded no apparent polypeptides and was not capable by itself of causing the overprodn. of colanic acid. However, when present in the same cell with rcsA, either in cis or in trans, rcsB caused expression of mucoidy in E. coli at all growth temps. These findings are best explained if the Klebsiella rcsA gene product acts as a pos. regulator of colanic acid biosynthesis in E. coli and that activity of this protein is in turn subject to regulation by

FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 28 July 1999 (19990728/ED)

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for details.

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(FILE 'REGISTRY' ENTERED AT 16:35:35 ON 04 AUG 1999)
SAV L67 WESSEN049/A

FILE 'HCAPLUS' ENTERED AT 16:37:04 ON 04 AUG 1999

FILE 'REGISTRY' ENTERED AT 16:38:17 ON 04 AUG 1999
SAV L54 WESSEN049A/A TEMP

FILE 'BIOSIS' ENTERED AT 16:38:37 ON 04 AUG 1999
E BAY S/AU
L68 30 S E3,E4,E14
E CANTACUZ/AU
L69 30 S E6-E8
E LECLERC C/AU
L70 152 S E3-E5,E10-E12
E LO MAN R/AU
L71 17 S E3,E4
L72 200 S L68-L71
L73 9 S L72 AND ?GLYCOPEPTID?
L74 0 S L72 AND ?GLYCOCONJUGAT?
L75 16 S L72 AND ?CONJUGAT?
L76 58 S L72 AND VACCIN?
L77 71 S L72 AND ANTIGEN?
L78 15 S L72 AND (?SACCHARID? OR CARBOHYDRAT?)
L79 132 S 345?/CC AND L72
L80 17 S L79 AND L73,L75
L81 1967 S L24
L82 0 S L72 AND L81
L83 2 S ?LYSIN? AND L72
L84 2 S L83 AND L73-L80
L85 1 S L84 AND MAG

FILE 'BIOSIS' ENTERED AT 16:43:20 ON 04 AUG 1999

=> d all

L85 ANSWER 1 OF 1 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1997:403389 BIOSIS
DN PREV199799709592
TI Preparation of a multiple **antigen glycopeptide** (**MAG**) carrying the TN **antigen**. A possible approach to a synthetic **carbohydrate vaccine**.
AU **Bay, Sylvie; Lo-Man, Richard;** Osinaga, Eduardo; Nakada, Hiroshi; **Leclerc, Claude; Cantacuzene, Daniele (1)**
CS (1) Unite Chimie Organique, Inst. Pasteur, 28 rue du Dr. Roux, 75724 Paris Cedex 15 France
SO Journal of Peptide Research, (1997) Vol. 49, No. 6, pp. 620-625.

ISSN: 1397-002X.
DT Article
LA English
AB The glycosidic tumor-associated Tn **antigen** was **conjugated** to a **lysine** backbone containing a helper T-cell epitope in order to activate immune responses specific for some types of carcinomas. As opposed to traditional protein **conjugates**, this multiple **antigen glycopeptide** (**MAG**) offers the advantages of the lack of immunogenicity of the **polylysine** core and of accurate chemical definition. The **MAG** construction was assembled by conventional solid-phase peptide synthesis. The analysis of its **antigenicity** demonstrated that the Tn **antigen** on the **MAG** is recognized by Tn-specific monoclonal antibodies.
CC Biochemical Studies - Proteins, Peptides and Amino Acids 10064
Biochemical Studies - Carbohydrates 10068
Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
Neoplasms and Neoplastic Agents - Biochemistry *24006
IT Major Concepts
Tumor Biology
IT Miscellaneous Descriptors
BIOCHEMISTRY AND BIOPHYSICS; CARCINOMA; MULTIPLE **ANTIGEN GLYCOPEPTIDE**; NEOPLASTIC DISEASE; POSSIBLE APPROACH; PREPARATION; SYNTHETIC **CARBOHYDRATE VACCINE**; TN **ANTIGEN** CARRYING; TUMOR BIOLOGY

=> d his 186-

(FILE 'BIOSIS' ENTERED AT 16:43:20 ON 04 AUG 1999)
L86 59 S 10068/CC AND 10064/CC AND L72
L87 17 S L86 AND VACCIN?
L88 11 S L86 AND ?CONJUGAT?
L89 3 S L87 AND L88
L90 2 S L89 NOT L85

=> d all tot

L90 ANSWER 1 OF 2 BIOSIS COPYRIGHT 1999 BIOSIS
AN 1998:262103 BIOSIS
DN PREV199800262103
TI Reduced response to multiple **vaccines** sharing common protein epitopes that are administered simultaneously to infants.
AU Dagan, Ron (1); Eskola, Juhani; **Leclerc, Claude**; Leroy, Odile
CS (1) Pediatric Infectious Disease Unit, Soroka Univ. Med. Cent., P.O. Box 151, Beer-Sheva 84101 Israel
SO Infection and Immunity, (May, 1998) Vol. 66, No. 5, pp. 2093-2098.
ISSN: 0019-9567.
DT Article
LA English
AB The plethora of newly discovered **vaccines** implies that, in the future, many **vaccines** will have to be administered simultaneously to infants. We examined the potential interference with the immune response of several coadministered **vaccines** containing the same protein component, namely, tetanus toxoid (IT). Infants simultaneously receiving a tetravalent pneumococcal **vaccine conjugated** to TT (PncT) and a diphtheria-tetanus-pertussis-poliovirus-Haemophilus influenzae type b-tetanus **conjugate vaccine** showed significantly lower anti-H. influenzae type b

polysaccharide (polyribosylribitol phosphate (PRP)) antibody concentrations than those receiving either a tetravalent pneumococcal **vaccine conjugated** to diphtheria toxoid or placebo. A dose range study showed that anti-PRP antibody concentrations were inversely related to the Tr content of the PncT **vaccines** administered in infancy. Postimmunization antitetanus antibody concentrations were also affected adversely as the TT content of the coadministered **vaccines** was increased. This phenomenon, which we believe derives from interference by a common protein carrier, should be taken into account when the introduction of an immunization program including multiple **conjugate vaccines** is considered.

CC Pharmacology - Immunological Processes and Allergy *22018
Biochemical Studies - Proteins, Peptides and Amino Acids *10064
Biochemical Studies - Carbohydrates *10068
Biophysics - Molecular Properties and Macromolecules *10506
Pharmacology - Clinical Pharmacology *22005
Pediatrics *25000
Immunology and Immunochemistry - Bacterial, Viral and Fungal *34504
Immunology and Immunochemistry - Immunopathology, Tissue Immunology *34508

BC Hominidae 86215

IT Major Concepts
Clinical Immunology (Human Medicine, Medical Sciences); Pediatrics (Human Medicine, Medical Sciences); Pharmacology

IT Chemicals & Biochemicals
anti-Haemophilus influenzae type b polysaccharide antibody; antitetanus antibody; diphtheria-tetanus-pertussis-poliovirus-Haemophilus influenzae type b-tetanus toxoid **conjugate**: immunostimulant - drug, **vaccine**; tetanus toxoid: peptide carrier, **vaccine** component; tetravalent pneumococcal **vaccine** tetanus toxoid **conjugate**: immunostimulant - drug

IT Miscellaneous Descriptors
common peptide carrier effect; multiple **vaccine** reduced response: common protein epitope sharing

ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGN Organism Name
human (Hominidae): infant

ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates

L90 ANSWER 2 OF 2 BIOSIS COPYRIGHT 1999 BIOSIS

AN 1987:358870 BIOSIS

DN BA84:56273

TI MODULATION OF CARRIER-INDUCED EPITOPIC SUPPRESSION BY BORDETELLA-PERTUSSIS COMPONENTS AND MURAMYL PEPTIDE.

AU VOGEL F R; **LECLERC C**; SCHUTZE M P; JOLIVET M; AUDIBERT F; KLEIN T W; CHEDID L

CS INST. PASTEUR, IMMUNOTHERAPIE EXP., 28, RUE DU DR. ROUX, 75724 PARIS CEDEX 15, FR.

SO CELL IMMUNOL, (1987) 107 (1), 40-51.
CODEN: CLIMB8. ISSN: 0008-8749.

FS BA; OLD

LA English

AB Synthetic antigens employed in experimental synthetic **vaccines** are generally small haptenic peptides. Therefore, effective immunization with these antigens usually requires the use of an immunogenic receptor. Tetanus toxoid has been proposed for use as a carrier in future synthetic **vaccines** due to its high immunogenicity and acceptance for human

use. Previous studies employing standard hapten/carrier systems such as DNP/KLH have demonstrated, however, that an epitope-specific suppression occurs when mice previously primed with carrier are subsequently immunized with an haptenic epitope **conjugated** to the same carrier. These same studies have shown that Bordetella pertussis **vaccine** administered at the time of carrier priming abrogates epitopic suppression. In the present investigation, epitopic suppression was studied in a synthetic **vaccine** model employing tetanus toxoid as a carrier. Results from these studies indicated that mice primed with tetanus toxoid 1 month before immunization with a peptide-tetranus toxoid **conjugate** exhibited enhanced secondary anti-tetanus toxin responses but decreased anti-peptide responses. Furthermore, injection of pertussis **vaccine** or purified B. pertussis toxin or endotoxin at the time of carrier priming could block the establishment of epitopic suppression. Administration of B. pertussis components enhanced antibody responses to both the carrier and the synthetic peptides as compared with responses of control animals. In addition, administration of an adjuvant-active nonpyrogenic derivative of muramyl dipeptide. Murabutide, with carrier priming reduced epitopic suppression of anti-peptide responses. B. pertussis toxin or endotoxin administered to mice previously suppressed by carrier priming with the first injection of carrier-peptide **conjugate** overcame epitopic suppression with resultant titers of anti-peptide antibody equal to or greater than nonsuppressed controls. These results suggest that the use of adjuvants with future synthetic **vaccines** may contribute the additional advantage of overcoming epitopic suppression, thus permitting the use of common, well-tolerated carrier systems such as tetanus toxoid in synthetic **vaccine** preparations.

CC **Biochemical Studies - Proteins, Peptides and Amino Acids 10064**
Biochemical Studies - Carbohydrates 10068
Metabolism - Proteins, Peptides and Amino Acids *13012
Pharmacology - Clinical Pharmacology 22005
Pharmacology - Immunological Processes and Allergy *22018
Toxicology - General; Methods and Experimental 22501
Toxicology - Antidotes and Preventative Toxicology 22505
Physiology and Biochemistry of Bacteria 31000
Immunology and Immunochemistry - Bacterial, Viral and Fungal *34504
Medical and Clinical Microbiology - Bacteriology *36002

BC Gram-negative Aerobic Rods and Cocci - Uncertain Affiliation 04720
Bacillaceae 05610
Muridae 86375

IT Miscellaneous Descriptors
MOUSE SYNTHETIC **VACCINE** TETANUS TOXOID MURABUTIDE ADJUVANT

RN 74817-61-1 (MURABUTIDE)